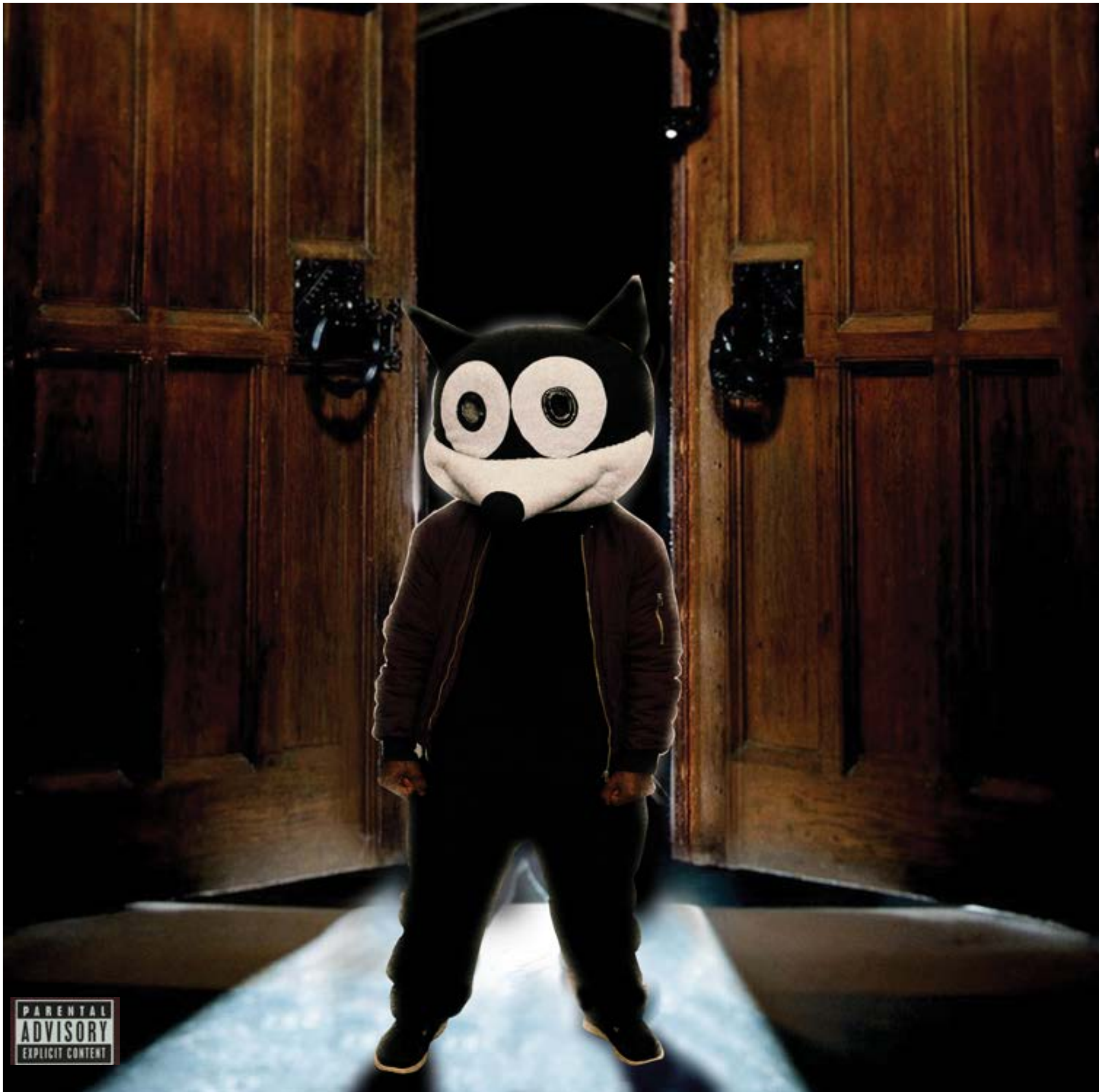




Felix

The Student Newspaper of Imperial College London



EDITORIAL

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Felix 1700

Andy Djaba – Felix Editor



This week's issue of *Felix* is Issue 1700! Happy Birthday (?) *Felix*! In light of this being Issue 1700, the Felix team and I had a lot of fun digging in the archives this week. It's fascinating to see how the paper has evolved from the hand-drawn front covers of Issue 1 in 1949 to the behemoth of a paper we have today. It's also interesting to observe how times and opinions have changed over the years. The centrefolds definitely used to err on the wrong side of creepy back in the day and the classic "drunk mate of the week" section might just need to be revived in the near future! Featured in this week's issue of *Felix* is a special *Felix 1700* centrefold pullout, highlighting the more eye-catching front covers from the past 1699 issues. Music Editor, Adrian LaMoury, has also included a really interesting article in the Music section this week, detailing some of the big name artists that have graced the Imperial College stage in the past. From Pink Floyd and Queen to Sir Elton John and Fleetwood Mac, Imperial really did used to pull in the big names to perform at Summer Ball. It begs the question, "who

was last year's Summer Ball headline act...?" This week's horoscopes also include throwback adaptations of classic horoscopes from the *Felix* archives!

"Happy Birthday (?) *Felix*!"

Once again, despite promising myself that this week would be different, I'm writing this editorial late on a Thursday night, as the print deadline edges ever closer. This week, I've

beaten my previous record of writing my editorial at 10.30pm, as it is currently 11.37pm... a whole hour and 37 minutes past the print deadline. I don't know how else to impress upon you just how close we come every week to not actually having a paper. If anything, I'll just blame Turnitin (that excuse worked for my entire degree).

On a more personal note, this week has been pretty tough for me and I would like to extend my deepest gratitude to all members of the *Felix* editorial team for being as amazing as usual and making my job a thousand times easier. I wouldn't

"Featured in this week's issue is a special Felix 1700 centrefold pullout, highlighting the more eye-catching front covers from the past 1699 issues"

have even realised that this week's issue was Issue 1700 if it weren't for the sharper members of the editorial team pointing it out.

You can probably already tell, but I still don't really know how to write an editroial. There's only so much waffling a man can do. Think I'm going to wrap this one up here.



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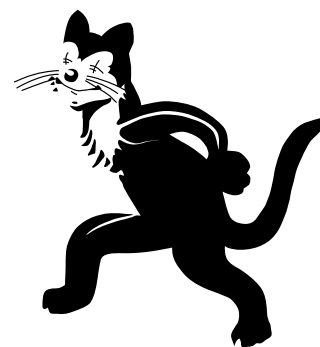
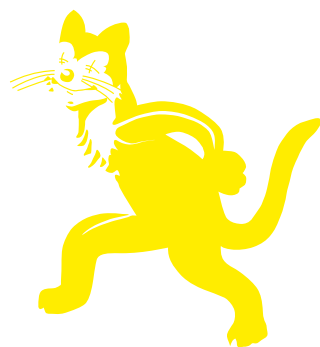
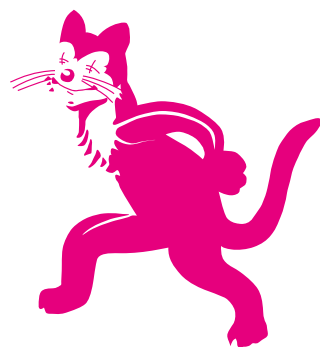
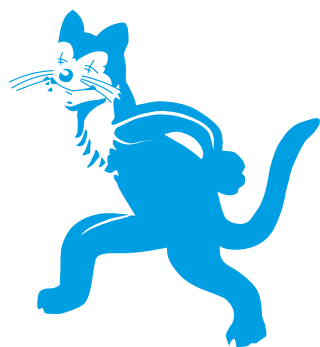
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NEWS

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Compromising Image of Imperial College Union Managing Director Emerges

Jarlath O'Hara, the Imperial College Union Managing Director, can be seen pictured with a man dressed in blackface

NEWS

Andy Djaba
Editor-in-Chief

A compromising image involving the Managing Director of Imperial College Union has emerged, *Felix* reports.

The photograph shows Jarlath O'Hara, the Managing Director of Imperial College Union, standing beside a man at what appears to be a party. The man can be seen posing while dressed in blackface.

The photograph, which is from over 12 years ago, was publically viewable as a 'featured image' on Jarlath's Facebook page and was discovered by an Imperial College undergraduate student at the end of July. Jarlath was made aware of the image's discovery at the end of August and immediately took action to remove the photograph from his Facebook profile, as well as later issuing the following apology: "I entirely condemn the act of 'blacking up' and at no stage have I ever condoned this or other discriminatory behaviours. I am deeply sorry for any offense or concern that this has caused".

In his position as Managing Director of Imperial College Union, Jarlath is effectively the highest ranking member of staff in the Union. At the time when the picture was taken, Jarlath was working as a Sabbatical Officer

at the London School of Economics (LSE). He held the position of Sport and Recreation Manager at LSE and, following the event in question at which the compromising image was taken, he proposed measures to ensure that subsequent events remain acceptable at all times. This was through ensuring that it was a requirement for all event themes and fancy dress ideas to be run through LSE's Student Union prior to each event.

"The photograph was publically viewable as a 'featured image' on Jarlath's Facebook page"

Following the emergence of the concerning image, an investigation was launched by Rob Tomkies, the Imperial College Union President, and Jill Finney, the Head of the Board of Trustees; both of whom have issued statements to *Felix*. Rob stated: "The act of 'blacking up' and indeed any form of discriminatory behaviour is completely unacceptable. Furthermore the Union completely condemns being passive in reaction to such behaviour.

Jarlath took direct



Imperial College Union//Imperial College London

action at the time of the event, twelve years ago, to prevent this type of behaviour happening again. Since joining Imperial College Union two and a half years ago he has brought tackling discrimination and social injustice to the forefront of the Unions priorities for the first time."

A meeting was held on Friday 5th October between Jarlath, Rob and concerned students who had seen the image; six of whom are BME students. Jarlath began the meeting by extending his apologies to those present and reiterating his condemnation of 'blacking up', whilst maintaining that he didn't know the picture existed and describing himself as "very embarrassed, very concerned, a bit confused

and annoyed" following the picture's existence being brought to his attention. He also stated that he "recognises that the photo being visible is a secondary aspect and the fact that the photograph was taken is the primary issue here". During the meeting, the students present repeatedly urged Jarlath to extend the apology made to those present to the wider student body through the release of a public statement/ acknowledgement. Jarlath declined to do so.

In a statement on behalf of the Board of Trustees, Jill Finney said: "The Board considers any kind of discrimination utterly abhorrent.

It is deeply unfortunate that Jarlath found himself photographed in these circumstances over 12

years ago. Compromising historical images are increasingly a feature of our daily lives and it is incumbent upon all of us to ensure we do not participate or fall victim to them.

The Board does not tolerate racism of any kind and have satisfied themselves that Jarlath has no racist intent whatsoever."

The act of dressing in blackface (or 'blacking up') was a form of theatrical make up used by non-black performers to caricature a black person. The practice gained popularity during the 19th century and contributed to the spread of racial stereotypes until it ended in the United States with the Civil Rights Movement of the 1960s.

"The students present urged Jarlath to release a public statement... Jarlath declined to do so"



Blackface//Hypebeast

NEWS

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Imperial hosts Muslim Student Panel

Inspiring Britain's young Muslims to embrace their faith as an integral part of their education

NEWS

Hafiza Irshad

News Writer

Ismaeel Karmani

News Writer

What is MSP?

Muslim Student Panel (MSP) is a campaign hosted by Imperial College Union in collaboration with 13 Islamic Societies across the UK. It was formed in order to support prospective university students in their decisions in pursuing higher education. Whilst there is an abundance of experienced and well-planned panels available to young students there has not been one specifically for Muslim students. The need for such an event is that, whilst Muslim students face the same worries as their peers such as personal statements, entrance exams and making friends, there are also a number of considerations that emerge from a need to ensure that they can comfortably enrich their faith throughout their university experience. This can include ensuring one has the correct (Islamic) intention, knowing how to navigate the intricacies of their religious obligations whilst studying or perhaps even advice on finding common ground with their ever-diverse peers. MSP aimed to alleviate these concerns by showcasing some of the gems we have in the Muslim academic community by providing them with a platform to share their experiences and impart some wisdom.

Co-headed by experienced student mentors, the focus was on inspiring the Muslim youth with confidence and excellence in their academic and spiritual life.

- Hafiza Irshad

“MSP is a campaign hosted by Imperial College Union in collaboration with 13 Islamic Societies across the UK”

The Launch of MSP

MSP was held at Imperial College London on Saturday 6th October. Keynote speakers included Ismaeel Karmani, a current final year EEE student, who spoke about the importance of gaining an education- which includes, but is not limited to, the typical school to University route. Ilyas Nagdee, NUS BME officer, was also invited to speak. He touched upon the importance of representation in higher education and aimed to inspire attendees to be the first in their field, not shying away from areas that lack diversity. This was then followed by a 7-membered panel featuring students from LSE, Keele, UCL, Portsmouth and Imperial along with some already working in



The panel had a diverse set of Muslim academics from Architecture to Mechanical Engineering //...

their prospective fields. Nora Abdoun, a 4th year Imperial Medical student said, "speaking on the panel was an absolute honour. The students were so eager to learn and I couldn't help but think of how much my younger self would have benefited from an event like this throughout". Halima Shah, a PhD student from UCL, also had a positive experience, sharing that "being on the panel was such an exciting and rewarding experience, I found it so beneficial meeting the other panelists and hearing about their journeys and advice, Alhumdullillah [praise be to Allah]!". Pre-submitted and live questions were answered on a range of topics from advice on writing personal statements to how to pray when a lecture clashes with prayer timings. Congregational prayer was performed, and the day ended with the opportunity to network with students representing a range of subjects and degrees.

The event received

positive feedback; one submitted said, "This was a really good event and I'm really glad that I attended it. I have benefited both spiritually and academically. It helped me make a decision of what I actually want to study and the reason why. Jazakallah khair [may Allah reward you with goodness] for organising I look forward to attend[ing] more events that you guys organise. May Allah bless you all who came yesterday".

- Hafiza Irshad

“Being on the panel was such an exciting and rewarding experience, I found it so beneficial meeting the other panellists”

Future Prospects

Given the ever-growing diversity of 21st Century Britain and by extension the landscape of higher education, where religion has become a prominent aspect of many a student's identity, values and aspirations, a panel with focus on fusing ones religiously informed ethos with their academic and occupational aspirations is likely to be increasingly relevant and impactful. The MSP has the potential to go beyond simply providing insight into university life and applications by becoming a platform for Muslim students across the country to support and engage prospective students by allowing them to embrace their faith as an integral element of what informs their direction and, in doing so, capitalising on the opportunities that come with higher education. Be this through focused workshops or through talks tackling specific issues, the MSP has a versatility which will allow it to play a pivotal role in not only

encouraging increasingly more young Muslims to pursue a university education but also by supporting them to maximise their time whilst there.

- Ismaeel Karmani

“Speaking on the panel was an absolute honour. The students were so eager to learn and I couldn't help but think of how much my younger self would have benefited from an event like this”

NEWS

news.felix@imperial.ac.uk

Imperial College Men's Rugby Club loses appeal

The punishments for the February "Fiesta Dash" event, which involved public nudity, other indecent exposure and vulgar behaviour, will be upheld

NEWS

Andy Djaba
Editor-in-Chief

On Wednesday 3rd October, it was revealed that Imperial's Men's Rugby Club (ICURFC) had lost its appeal against the sanctions following its February "Fiesta Dash" event.

The sanctions, which included all four ACC

Rugby teams being banned from competing in their first three league (non-cup) matches of the 2018-19 academic year, will be upheld following the failed appeal.

As reported by *Felix* in *June*, the 'Mexican-themed' "Fiesta Dash" event, which was held on 7th February, quickly spiralled out of control and resulted in public nudity and indecent exposure. The club-sanctioned event was organised by club social secretaries and approved by the

club captain. Video and photographic evidence which had been shared in a WhatsApp group chat were published in *The Sun* in early June. The story was then quickly picked up by a number of other national newspapers, including *The Telegraph* and *Independent*.

Students were captured revealing themselves in front of the Cenotaph, climbing naked into fountains in Trafalgar Square, and making 'jokes' about Mexicans and disabled people. Photographs of

the students posing naked in front of the Winston Churchill statue in Parliament Square, covering their genitals with sombreros also emerged, along with other pictures of the team members exposing themselves outside the Royal Albert Hall and downing bottles of wine.

At the time, both the College and Imperial College Union described the students' behaviour as "completely unacceptable" and the team was suspended, pending further investigation. The subsequent hearing was held on 20th June and, in addition to the aforementioned punishment, further sanctions were also levelled against the club. These include removal of tour privileges until 31st July 2020 and revocation of the committee and club captain's authority to make independent financial and social event decisions. All such decisions must be ratified by the Union President until 31st July 2020.

In a statement given to *Felix* in June on behalf of the Union and the College, a representative said: "This alleged behaviour goes against the values and expectations of our student and staff community and is completely unacceptable."

The rugby club is "deemed to have brought the Union into disrepute" and further videos showed team members encouraging each other to defecate in public. One student can be seen exposing himself on a public tube carriage, whilst other videos show the students making offensive comments: in one, a student in a sombrero and poncho clammers over a high wall, while

CLUB'S POINTS SYSTEM
Tasks must be done in Mexican costume

2 POINTS

- All team members down a pint
- Take a team photo in front of a landmark

10 POINTS

- Every team member must drink a bottle of wine
- Build a wall or dig a tunnel
- Swim in water
- Take up role of border guard and don't let people into a place
- Kiss a random stranger

30 POINTS

- Team share bottle of tequila
- Naked picture (bonuses for flair)
- Bring a Mexican to the Students' Union

BONUS POINTS

- Rogue action (points at discretion of social secretary)

Rugby Club's "Fiesta Dash" Point System // *The Sun*

another shouts "typical immigrant". Another video allegedly shows a student trying to dance with a disabled girl in a nightclub; a comment on the WhatsApp group reads: "Poor girl can't even walk away."

It should be noted that the Rugby club was cooperative during the investigation. In June, a representative of ICURFC told *Felix*: "The rugby club are deeply regretful about the behaviour which occurred in this incident and how it reflects on the university and members of the club."

The event organisers have been expelled from representing the College in any sporting competition, for any club with BUCS membership until 31st July 2019, while the other individuals involved

have been suspended from representing the College, in any sporting competition, for any club with BUCS membership, until 31st July 2019. Any breach of the sanctions before 31st July 2020 will automatically incur a complete two-year competitive ban for the entire club, if the incident in question is reported to the Union by the club. If the incident in question is reported by anyone other than ACC Rugby, the club will incur a four year complete suspension.

It is telling that, despite the event occurring in February, nobody in the club thought it important to call out this behaviour; this suggests the need for cultural reform within ACC Rugby.

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POLITICS

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How to Save the American Supreme Court from the Republicans

Avi Banerjee suggests that the Democrats should embrace radical solutions to reform the highest court in America and restore its liberal balance

Politics

Avirup Banerjee

Politics Editor

After the election of 1800, who would become the third President of the American Republic was very much a mystery. With the electoral college tied at 73 between Thomas Jefferson and Aaron Burr, the decision was left to the House of Representatives with Jefferson only winning the Presidency after the 36th ballot. While the national media was obsessed with the voting in the House of Representatives, the jurisprudence of all succeeding constitutional republics was set. During the nearly five-month lame-duck period (yes that was how long it was prior to the passing of the 20th amendment), John Adams nominated and got the Senate to confirm John Marshall as the Chief Justice of the United States. Thus, despite the Federalists never winning a presidential election again, through his historic judgment in *Marbury vs Maddison*, Justice Marshall set forth the precedence of judicial review and ensured that the Federalist viewpoint remained at the centre of American Government for the next 35 years. To those that think the American judiciary suffered because of the fierce battle over Brett Kavanaugh's nomination, they are unfortunately historically ignorant. The Supreme Court has always been a political battle front, and



Lady Justice // Wikimedia

it's high time that the Democrats learned how to successfully wage this war.

Since 1968, the Democrats have only been able to nominate and successfully confirm four justices. During this same period, Republicans have successfully nominated 15 Justices. Democrats have been losing this battle for the last 50 years, with Republicans not even pretending to act with any decorum or respect for the rules and traditions of the senate. The sheer audacity of the Republican majority in refusing to even give Barack Obama's nominee Merrick Garland a hearing let alone a vote on the senate floor, must be recognised for what it is – theft.

Ever since the retirement of Earl Warren, the Supreme Court has been deeply conservative, with the odd few exceptions, in its judgments. This façade that Antony Kennedy was a legitimate swing vote

needs to be corrected. Justice Kennedy voted in favour of Bush in *Bush v Gore*, authored the majority opinion in *Citizens United* that legalised unlimited corruption in American politics and voted to overturn Obamacare. These are only a sample of the litany of partisan decisions Justice Kennedy has made over the years. With the exception of Justice Souter, all Republican appointee Supreme Court judges have been far right-wing zealots. Justice Kavanaugh is only the latest example.

Republicans had no qualms in confirming a man who has been credibly accused of attempted rape by three individuals. In 1991, the Senate shamefully belittled another credible accuser of sexual harassment, Professor Anita Hill, and confirmed Clarence Thomas. In the 27 years since, many things have changed in society. Gay marriage

has been legalised, there was an African-American President and a woman won the popular vote in a presidential election. Despite these historic social changes, when the choice comes to either believing a credible victim of sexual assault or appointing the said accuser to the highest court of the land, Republicans will always choose the latter.

Republican justices have also not attempted to hide their many unethical backgrounds and practises. Justice Abe Fortas was forced to resign from the court (which enabled the Conservative wing to gain control of the court for the first time in a generation ... and the same control which it has retained ever since) and faced impeachment due to his continued retainer fees of \$20,000 from his former client. In today's day and age, where Justice Scalia died while living free of charge in the estate of John Poindexter (one of his com-

panies was facing a trial in the court) and Justice Kennedy retiring while his son does business with the Trump family. Justice Fortas' resignation because of ethical consideration 50 years ago now pales in comparison to the swamp that is the Republican party. Even before Dr Christine Blasey Ford's courageous testimony, Brett Kavanaugh had already disqualified himself when he committed perjury by lying about his past actions as a political apparatchik for George W Bush.

In the election for President in 2020, whoever becomes the Democratic nominee must pass a simple yet groundbreaking litmus test: promise to pack the court and restore balance. How could the present situation continue when in this century alone the Democrats have comfortably won the popular vote in all but one presidential election, but been allowed to confirm two Supreme Court judges compared to the Republicans' four. Nowhere in the American constitution is it written that the Supreme Court must have nine judges, in fact this number has changed over the years. The constitution sets Congress as the arbiter for determining the size of the Court, and over the years Congress has acted on it. Court packing is a hallowed tradition that was common practise in the 19th century. It was only after Franklin D Roosevelt's failed attempt to increase the size of the court in 1937 that court packing became a taboo. If Democrats want to restore balance, they must not fear the backlash from

the corporatist media, and follow in the lead set forth by their greatest ever president. In Washington, bipartisanship usually mean one thing, the common man being screwed. Wars and increased defence spending will always get bipartisan support. Giving healthcare to the poor? Never. So Democrats must not seek bipartisanship, when the Republicans have made clear they will never reciprocate. The Republicans removed the filibuster for Supreme Court when they confirmed Justice Gorsuch last year. When the democrats regain control of both chambers of Congress and the Presidency, they must take the next step. Get rid of the legislative filibuster. Leave alone the Supreme Court, all the progressive goals like universal healthcare and protecting the environment can never overcome a Republican filibuster in the Senate. Correspondingly, the Democrats should pass a Judicial Reform Bill with a simple majority in expanding the court from nine to eleven. And then appoint two very young liberal judges. Only with this nuclear option will Republicans agree to come to the negotiating table and propose a bipartisan amendment to the constitution that would enable every president to appoint two, and no more than two, Supreme Court appointments or introducing term-limits for judges. Either way the status quo cannot be allowed to remain.

POLITICS

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Bolsonaro Wins the First Round: Brazil Goes Balls Up

The victory of the far-right candidate in the first round of the Brazilian election threatens the safety of the country's minorities, women and environment

POLITICS

Juan Ignacio Rubio
Politics Editor

South American countries have usually been ignored by the Western media, with few exceptions. On the few occasions the continent was reported by our news organisations, its nations were painted as permanently failed states ravaged by civil war, dictators and death squads. This picture ignores the deep changes that the region has experienced since the late 80s, when the regimes that dominated the region started to crumble, a combination of indigenous democratic revolts against the despotic rulers and the loss of support for said rulers of successive American administrations, that had propped up criminals like Pinochet or Ríos Montt to curb the Soviet influence in the region (as one President of the USA put it: "They may be bastards, but they're our bastards.").

Brazil is a textbook example of this phenomenon. After the military dictatorship was toppled in 1985, the leftist government of Luiz Inácio Lula da Silva's Workers' Party instituted policies like the Bolsa Família, that gave financial benefits to poorest elements of society in return for providing their sons and daughters school education and ensuring that they were vaccinated. Thus, a new middle class arose for the first time in the history of the country,



Meet the Brazilian Donald Trump// Wikimedia

to the chagrin of the Brazilian elites, who had benefitted for centuries from the extreme inequality. It should also be remembered that class and race in Brazil are strongly correlated: the whiter your skin looks, the more likely you are to belong to the well-off class.

The economic transformation was accompanied by a religious one. Brazil, historically a uniformly Catholic country, became fertile ground for the American branches of Protestantism that advocate the prosperity gospel (which are part of the wider Evangelical

movement in the USA), a theology that states that it is God's will to acquire wealth. The Evangelicals

"In the past 10 years, the worldwide economic downturn has hit Brazil pretty badly."

have gone from being statistically insignificant to forming 20% of the

Brazilian population in 2010.

In the past 10 years, the worldwide economic downturn has hit Brazil pretty badly. The formerly emergent economy was in recession between 2014 and 2016. The difficult economic situation led to the impeachment of Dilma Rousseff, Lula's successor at the highest office of the country, on charges of corruption. The process was seen as a farce by her supporters, who claimed that Rousseff had been unfairly tried and had been expelled from the presidency by the actions of obscure interest groups.

"How can Bolsonaro be described? Well, let his statements speak for themselves."

Lula himself is now in prison, having been found guilty of corruption in a trial that many don't consider fair. With the two biggest stalwarts of the left discredited, the figure of Jair Bolsonaro started to rise.

How can Bolsonaro be described? Well, let his statements speak for themselves. He said that a female political opponent was not even worthy of being raped. He called Haitian immigrants "the scum of humanity". He is an ardent admirer of Brazil's former military junta. In addition to all this, he has been clear in his homophobia, racism, sexism and anti-poor views (he is a proponent of the forced sterilisation of the lower classes, as well as being a noted climate change denier).

Bolsonaro's far right demagoguery has resonated in a country plagued by crisis and turmoil. He began to rise in the polls, forming an electoral coalition of the new upper middle classes, the long-standing elites, the army and the most socially conservative groups in Brazilian society, usually grouped around the Evangelical

churches. His popularity propelled him to the first place in the first round of the presidential election, held last Sunday.

Bolsonaro got 46.03% of the vote nationally, crossing the 50% mark in the whiter southern states of the country. He was followed distantly by Workers' Party candidate Fernando Haddad, as Lula (who was the only politician able of beating Bolsonaro according to every major poll) was ineligible to run due to his sentence. Brazilians will go to the polls again on the 28th of October to choose between Bolsonaro and Haddad in the second round of the election.

Bolsonaro is the last in a long line of right wing demagogues that have arisen everywhere in the world due to the challenges brought by globalisation. He is very similar to the Philippines' Rodrigo Duterte, who infamously won the presidency of his country on a platform of encouraging the extra-judicial killing of drug dealers. If one believes his rhetoric, Bolsonaro will bring the country back to the time of the authoritarian junta. His victory would also affect the global fight against climate change, as Bolsonaro has proposed increasing the exploitation of the Amazonian rainforest, the planet's largest green expanse. Thus, it may not be an exaggeration to state that the fate of the world will be decided by the Brazilian electorate in two weeks. May they choose wisely.

COMMENT

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Brexit just isn't worth it.

It's ridiculous that at such a politically volatile time Imperial students are happy to just sit there with their curly fries. The time for change is now.

COMMENT

Saym Hussein

Comment Writer

I am still angry. After over 2 years of politics surrounding Brexit, nothing good at all has happened. Our country is fractured, major issues with domestic policy haven't been dealt with, and our government is a puppet of the far-right. It is about time that we come to terms with the fact that Brexit just isn't worth it.

From the start of this process, Brexit has been framed as being a middle finger to the establishment because government was not working for the working class. However, many of the frustrations that regular people care about aren't actually caused by EU policies. Issues like income inequality, housing, education, healthcare, immigration, transport, poverty, homelessness, etc. were all dependent on the policy of the Tories' deep austerity, i.e. British domestic policy. I believe that people were genuinely fed up of 6 years of cuts and needed an outlet, hence why we saw such

“Issues like inequality, education, poverty, homelessness are the results of austerity”



Theresa May in happier times// Flickr

a close result in the 2014 Scottish independence referendum. Wealth is not evenly spread across the country, and as a result, creates a sentiment where people feel left behind by the growth of London and the economy. With London alone accounting for 24.8% of the UK's GDP (as of 2015) the and the OECD saying that “The highest levels of income inequality in Europe are reached in the United Kingdom and the Baltic States.”, we need to open the discussion surrounding income inequality in and implement policies to combat this,

rather than blaming the EU for all our issues. This severe inequality in the UK, I believe, set the pretext as to why people were willing to test the boundaries of British politics and see if such a radical idea like Brexit could come into fruition, all in an effort to make their voices heard.

However, what makes me genuinely upset is aimlessness in which this electoral potential was aimed at. Instead of a grassroots movement where we could hold crony capitalists accountable and demand reform that works for all people,

via party and general elections, the public anger was capitalised by the far-right of this country for their own extreme political agenda, then manipulated by the Tories (the source of deep austerity over the previous 6 years) for political points. “Blame the EU” we were told. Many were convinced that the EU was the source of all our domestic struggles and that being British and European weren't compatible, all in an effort to “take back control” and return the ‘glory days’ of the empire. This is political talk for supremacy like the times of British

colonialism where Britain used the tactic of divide and rule to assert its Anglo-Saxon dominance on the world and perpetuate a narrative of ‘us against them’. The thing is, history is cyclical. We have heard these racist assertions 50 years ago with the migrants of Uganda, India, Pakistan, and the Caribbean. Has our country been invaded? Has our country lost its British identity? Has our country become a wasteland? I don't think

“British culture has developed our country to become a global and cultural exporter”

so. In fact, I argue that British multiculturalism has actually developed our country to become the global hub and cultural exporter that it is today. So why should we treat today's fearmongering of the “immigration crisis” any different to the past? Why does it deserve any validity?

2 years down the rabbit hole of Brexit, I think it is important to realise that we are at a stage where the far-right are now moderates and extreme political talk is normalised. Whenever I hear talk about “taking back control”, it may be framed as a reasonable argument for controlling immi-

gration, but as a British person of colour from an immigrant family, I can't help but see the blatant underlying racism and desire for British supremacy. It's the 21st century and the political currency is diplomacy and soft power, not annexation of land the oppression of people. Our government seems to have lost any form of reasonable diplomatic skill and is, instead, on a delusional pursuit towards British “independence” and an assertion on global trade – almost like colonial times. Those who believe that Britain will realistically remain a top 5 economy are delusional. The reality is that although the sun never used to set on the British empire, today the United Kingdom is a small island off the coast of Europe with moderate population of 65 million people and a love of tea. PwC's report on the long view of global economies predicts that UK's economy will be overtaken by Mexico, Russia, Indonesia and India. That is just a matter of fact that we have to deal with. So, this notion that Britain can ‘become independent again’ and assert its dominance just like we used to 200 years ago is just farcical.

From an economic perspective, Brexit again doesn't really solve our domestic issues. It is just a ploy to loosen regulations (which I must mention, keep us safe!) for selfish economic gain. Brexit in this perspective is a compromise of our safety for few more pounds. A recent example of how this could impact us is seen by the

COMMENT

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devastating disaster of Grenfell, Tower where 72 innocent lives were taken because of a lack of regulation surrounding fire safety in cladding, which essentially allowed flammable cladding to be placed on Grenfell tower. After Brexit, imagine what deregulation could do to public safety, and the safety of goods we use. Cheaper materials for higher profit margins, for example, would mean that consumer and environmental standards suffer as a result. Of course, there should be balance in regulations, as with everything, but as

“EU regulations surrounding goods and services have benefitted our safety”

a whole, EU regulations surrounding goods and services have benefitted our safety and experiences at the expense of large corporations who only care about their shareholders and their stock market price. Brexiteers who claim that controlling our own regulations would be better for striking trade



Theresa May is not happy// Flickr

deals and boosting the economy are often the same Tories that are able to influence policy to their own economic advantage. A post-Brexit Britain would have to become low-regulation, low-tax country to attract investment and strike trade deals. The notion that not paying into EU will save us money that can be invested in public services is nonsense. As a result of Brexit, cuts in tax-funded services, like NHS and education, would affect the poorest the most, whereas the wealthiest echelons of society stand

to gain the most and can afford to switch to private healthcare and education.

It is for this colonialist and economic selfishness that I say that Brexit is a political project for the far-right British elite, framed as a stand against the establishment which they are very much a part of. Look at us now, Theresa May – the embodiment of British elitism – is the prime minister, and her domestic policies are very much similar to the Cameron establishment that was demonised during the 2016 referendum. The truth

is that for real change to happen in this country, we need a shake-up in traditional British government and to elect people that genuinely care about the betterment of the whole of the United Kingdom and all its different and beautiful people.

But for now, we are looking at a bleak, not too distant future where a disastrous no-deal Brexit is likely, causing the far-right to be bolstered, hate crimes to increase, and civil unrest to take place across the country. Brexit was sold to us on lies, fearmongering, and

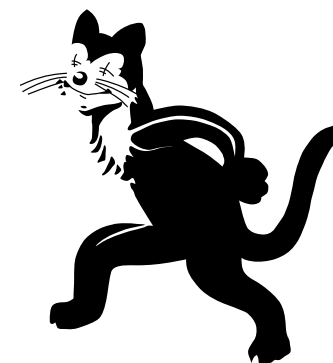
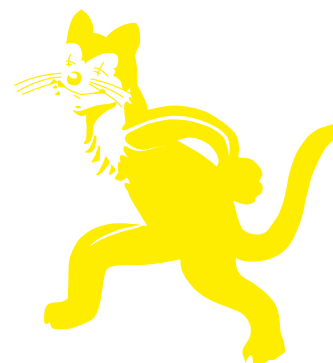
a predated colonialist ideology. The vote was won on a close majority of 1.9% - possibly swayed by the overspending by the Vote Leave campaign. London, Scotland, and Northern Ireland are being pulled from the EU out of their own will. People voted for change, but no one voted for this.

That is why I am in favour of a second referendum to reset the deadlocked politics that we are suffering. The EU is not perfect, there is a reasonable argument for Brexit. However, we are geographically not going anywhere and the EU member states are our neighbours, therefore the best way to trade and reform the structure of our relationships is within the European Union. We need to have honest and frank debate about Brexit and about immigration – because it is a real concern for some people and should not be wholly dismissed as racist. But no, a second referendum is not “going against the will of the people”; it is the democratic choice make. People can change their minds, and democracy should allow it, especially now that we know what Brexit actually means. I am a part of a generation that currently stands to lose everything for choice that I didn’t make because of an elderly nostalgia for the British Empire.

“I am in favour of a second referendum to reset the political deadlock”

Two years on from the referendum, the 18, 19 and 20 years olds of today deserve a chance to voice their opinion, not for sake of partisan politics but for the sake of democracy itself. The Tories are currently pursuing an agenda of electoral repression by increasing restrictions for voting, and redrawing and reducing constituencies – which disproportionately affects young people, ethnic minority voters, lower income voters, and reduces the seats of opposition parties – all in an effort to bolster the conservative majority and retain their grasp on power. We should not stand for this. When far-right politics is dominating the political spectrum and Theresa May’s Government wants to restrict our say in British politics, we don’t have the luxury to be passive about politics.

Felix is recruiting!



We want you – yes, you! We’re looking for writers, photographers, editors, illustrators, reporters, computer experts and grammar nerds to join our team. No experience needed – we’ll teach you everything you need to know. If you’re interested, send us an email on felix@ic.ac.uk

COMMENT

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Is Kanye West going south?

Some call him the artist of the 21st century and some a self obsessed narcissist, but whether you love him or hate him, he's definitely here to stay.

COMMENT

Sung Soo Moon

Film Editor

Never far from controversy, Kanye West (now wanting to be known as Ye), has hit headlines again, provoking a lot of reaction from the internet following his appearance on the 44th season premiere of Saturday Night Live last week. Ye performed his single “I love it” with Lil Pump, as they danced around on stage dressed up as bottled water. Many came to ridicule his set; laughing at him and not with him. At the finale of the programme, Ye broke into a passionate speech about the Make America Great Again hat he’s wearing, liberal media and having the freedom of expression.

This is the man who blurted out “George Bush doesn’t care about black people,” at a Hurricane Katrina relief concert back in 2005, much to the shock of Chris Tucker and Mike Myers, who were co-presenting. He does this to highlight the negative media portrayal of African Americans affected by the Katrina and suggesting that the relief responses to black peoples were unfair. While this was early in Ye’s journey into blooming as the Kanye West he is known as today, we see that this man has no fear of controversy—he is not one to stand in line just because everyone else is. And to an extent he has succeeded in what he set



Kanye West being Kanye West// “I Like It” music video

out to do—Ye wants to raise the issue of racism, and he does so by making a provocative statement in the vein of clickbait, which he himself knows how ridiculous it is. Perhaps his methods are too extreme, as the common reaction to anything he does is anger and mockery, but it’s admirable for someone in the public eye to go against the grain. However, we look back at Ye’s comments in amusement, as the gravitas of his statement is survived by memes focusing on the absurdity of the situation.

Now fast track to this earlier this year, when he caused a tremendous amount of backlash with comments praising Donald Trump and about how slavery was a “choice”. Many in the African American community were outraged by Ye, forcing him to apologise. This

is certainly a different Kanye than in the example before; this is Kanye the satirical character, Kanye the provocateur, Kanye the absolute meme. It’s clear he’s just chatting a load of shit with the safety net that he is Kanye because he really doesn’t care about what anyone says. Why would he say these awful things? What is the point of pissing off a lot of people at the same time? Publicity, of course, in the way that only Ye knows how. 2018 has been a big year for Ye so far, releasing several singles, a solo self-titled album and a collaborative project with Pusha T called ‘Kids See Ghosts’. And coincidentally, all his controversies arose just before the releases of new music—his latest album ‘Yandhi’ was planned to release during the SNL performance, but didn’t. What he is doing is counterintuitive

but effective: the modern world is a saturated place full of all sorts of grey detritus that people forget about in times to come—but if one says something that goes against the politics of a people, it becomes something that latches onto the conscience of society as a whole. What a weird way to sell an album, is he doing anything more than that? What Ye is ultimately trying to achieve is to imprint his mark on the zeitgeist of today, to transcend his rapper status to something more of a historical landmark. So, in being angered by his actions to go vent it out on Twitter is exactly what fuels Ye’s purpose. He frequently compares himself to Leonardo da Vinci, Steve Jobs, Willy Wonka, Shakespeare, Google and many more other culturally important figures and entities. It’s not entirely

preposterous to label him as an artist of the 21st century, representative of the narcissism and anti-conformism as a consequence of social media culture. Ye is one of the most influential African Americans alive today and whether he feels a he has duty to serve as a spokesperson for his heritage is a different matter altogether.

“The fact that he can provoke a reaction is entirely what Ye set out to do”

If Trump embodies the voice of the disenfranchised right, then Ye could be considered an equal and opposite, representing the disenfranchised left—using freedom of thought and speech as a counterargument to his controversial comments. He claims to have been “bullied backstage” at SNL for wearing the MAGA hat and calls for “debate not diatribe” in the ongoing tussle between the right and the left in modern America. In the closing moments of the show, Ye talks about how 90% of news, LA, New York, writers and rappers are liberal, and how there’s no balance—an almost Thanos-esque statement, while saying he can’t be told what to do because when he puts his “Superman cape” on.

He talks with a brio of a messianic preacher, with the lulling organ chords of his song “Ghost Town” in the backdrop. After thanking God for this platform, Ye sings “I feel kinda free. I thought this country said I could be me.” Even though most of what he said is generic and mostly meaningless tripe, the fact that it provoked a reaction is exactly what Ye set out to do. This is the same man who just performed onstage dressed as a bottle of Perrier water; it would be a mistake to take this man seriously. His tongue is always firmly in his cheek. I don’t even think he likes Trump, or even understands what he represents. Ye went on SNL because he craves attention for the sake of it.

In the back of all this is Ye’s mental health; he implies that he has bipolar disorder on the album cover of Ye and grappled with various other issues throughout his career. Obviously, this must be considered when assessing his actions—but I don’t think it’s entirely significant. Ye is just doing what he feels is right; there is no hidden agenda as it all comes from his heart. In truth, I don’t even think he knows what the hell he’s doing. If you like Ye and the stuff he does, then please continue to live your life peacefully. If you don’t, there’s still no good reason to get upset by him.

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From dear Reader to dear Leader

In response to **Grumpy Bastard's** article last week, Felix's resident leftist, **Grumpy Gramsci**, gives his perspective on politics at Imperial.

COMMENT

Grumpy Gramsci

Comment Writer

Salutations, fellow travellers! Bad news for regular followers of Grumpy Bastard's column: they've had to take the week off to recover from a ruptured spleen, suffered supposedly due to the cumulative traumas of Freshers' Week, the uncommonly pleasant weather, and the first advent calendars going on sale. That's how they were found, so I hear – slumped over the desk, having just penned the final word of their latest column, with their usual “creative associates” (John Smith and Jack Daniels) arranged around

them solemnly like some bizarre Neolithic monument to Middle England. But fear not, for I have been tasked with providing the allotted 600 words of bile this week; yes, the powers that be in Felix, in their infinite cowardice, have decided that “balance” is needed in the form of a Grumpy Gramsci to replace Grumpy Bastard [Ed.: I didn't get the Gramsci bit either].

Of course, avid readers of Felix will be aware that Grumpy Bastard is the balance, a lone voice of “sanity” (loosely defined) in a rag otherwise corrupted by us, the Hard Left. Like all good hacks, I know which way the wind is blowing, and I know who's signing my paychecks. These days, everyone in Felix is an

Edgy Marxist, and I'm certainly not one to miss a good bandwagon – I'll tote my tote and spoil my vote with the best of them.

The mistake that ol' GB makes, though, is in thinking that this state of affairs extends beyond the confines of the Felix office. In a shocking revelation, I can reveal that Imperial College is hardly a hotbed of radicalism, despite what previous columns would have you think. In truth, the Felix office is an oasis of Ideological Correctness™ in an otherwise apathetic desert. The response that typically greets those leftists among us when we mention politics is really much the same as the one received by righties: stony-faced silence. You would expect that this would be familiar even

to loyal readers of Felix, many of whom will have had to endure mind-numbing political conversations with the American stoner guy or that smug ginger prick at Meet the Writers events.

I'll concede that what few leftists there are tend to be a bit more visible on campus these days. You can sometimes find all five of us outside the main entrance or the library, clutching our chosen instruments of hate – the megaphone, the leaflet, even (dare I say it?) the box of chalk. Truly these are the end times, when a student can't even venture from the library to the JCR for fear of being engaged in dreaded human interaction. It's this flouting of convention – and there can be none more grave than daring to talk

to someone on London's streets – that makes us leftists so goddamn dangerous. Just take a look at us, with our hair, and our piercings, and our second-hand books; we represent nothing less than the decay of our once-great nation's moral fibre. Maybe we ought to just grow up, wear some normal glasses and buy a fucking Kindle like everyone else.

Or maybe not. I don't know about you, dear reader, but I don't miss the days of old, where women weren't allowed in the Union Bar. Bleeding-heart liberal Stewart Lee once described political correctness as a kind of institutionalised politeness, and I think that fits – it ought to be a courtesy, a sign of our respect for others, to consider

carefully the words we choose and the tone we use. After all, it's hardly an assault on campus freedom to be upbraided for joining some all-male Bullingdon-rejects club.

It seems, then, that I'm signing off on a disappointingly earnest note. Perhaps I've just spent too much time down in the West Basement echo chamber, but I for one would welcome a bit more action on campus. The green shoots of progress are there; for the first time in a long time, political discourse at Imperial seems to extend beyond “uhh...maybe let machines run things?”. So raise a glass in toast, comrades, and hoist the flag on high: long live the People's Republic of South Kensington!



Henry Hart accuses Sport Imperial of fraud

In light of the recent contract changes to the terms of use of Ethos, comment writer **Henry Hart** accuses Sport Imperial of acting fraudulently

COMMENT

Henry Hart

Comment Writer

Fraud: Wrongful OR criminal deception intended to result in financial or personal gain. At least that's the definition google gives me. It perfectly describes the situation that Sport Imperial

has created with its new scheme to increase Ethos fees to £30 a year. Yes, I could hardly help but hear you screaming through the page that this is an incredibly good deal for students – I agree. However, it was not the deal I made when I handed over my £40 for use of Ethos for the entirety of my degree. Charge freshers this new reasonable fee but Sport Imperial are not entitled to

void their contract with all previous gym users. That is fraud.

I was so astounded at this recent revelation, such that I could not believe that Sport Imperial would commit fraud, that I went to the Sport Imperial stand at Freshers' fair and asked the representative to clarify the situation. To my shock he confirmed that even people who had paid the £40 would

be required to pay £30 a year for gym access. He then qualified this by saying that Sport Imperial had consulted with the relevant student bodies, whatever that means, and that the gym facilities had been improved. Well that's all very well and good, but that DOES NOT give you the right to void your contract with me or any other student who was conveniently left

“Despite their original payment of £40, students now must pay a subscription of £30 yearly”

out of this ‘consultation’. And it was a contract. Aside from the legality surrounding the ‘verbal contracts’, a true Englishman's word is his bond, and for Sport Imperial to cast that principle aside shames this organisation and this University. I am disgusted that the union is condoning fraud.

SCIENCE

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2018 Nobel Prize in Medicine: the fight against cancer

James P. Allison and Tasuku Honjo's research may save many lives

SCIENCE

Paulina Rowinska

Science Writer

The 2018 Nobel Prize in Physiology or Medicine went to James P. Allison and Tasuku Honjo for the “discovery of cancer therapy by inhibition of negative immune regulation.”

Be it bacteria, virus or cancer cell, no foreign molecule can expect a warm welcome to our

body. T-cells, a type of white blood cells, bind themselves to potentially dangerous intruders, which triggers the immune system to defend us. Additionally, some types of proteins accelerate the full immune system response, while others inhibit it. This way our immune system attacks threatening intruders but leaves our own healthy cells alone. A typical war strategy: kill enemy soldiers, protect ours.

Unfortunately, cancer

manages to fool this so-called ‘checkpoint system’ by pretending to be a normal part of our body. The latest Nobel Prize laureates independently proposed special drugs called “checkpoint inhibitors”, which suppress proteins responsible for blocking our immune system. Now, the immune system gets a chance to assess cancer cells as “non-self” and destroy them. This way, the body can fight against cancer using natural

mechanisms, with just a little boost from drugs based on immunotherapy.

Allison and Honjo bring hope to patients for whom none of surgery, radiotherapy and chemotherapy would be

“This way, the body can fight against cancer using natural mechanisms”

available, for a variety of reasons. Their work inspired numerous clinical trials, with successes in lung cancer, renal cancer, lymphoma and melanoma (skin cancer).

Whilst side effects of checkpoint therapy can be as dangerous and unpleasant as of other cancer treatments, our knowledge of autoimmune reactions allows us to manage them better. Current research focuses on explaining and treating these side effects even more effectively.

“Cancer kills millions of people every year and is one of humanity’s greatest health challenges. By stimulating the ability of our immune system to attack tumour cells, this year’s Nobel Prize laureates have established an entirely new principle for cancer therapy”, we can read at the Nobel Prize official Twitter account. Did we find ‘the cure’ for cancer? Probably not. But Allison and Honjo’s research can definitely save hundreds of lives.

Can’t Stop, Won’t Stop: Science on why we can’t stop eating

SCIENCE

Sarah Wong

Science Writer

I lied to myself again: “I will just have one more,” as I engulfed the whole bag of crisps. Interestingly, this gluttonous behaviour can be explained by science, so we are not to be blamed entirely.

In the brain, there are two main types of neurones that impact our

appetite in the hypothalamus: those that make us crave food (orexigenic), and the other suppresses this desire (anorexigenic). An example of orexigenic neurones would be the cells expressing proopiomelanocortin (POMC), which is a stress-related gene; and an example of anorexigenic neuron would be agouti-related protein (AgRP), where it is known that agouti-expressing mice are generally obese. These

nerve cells respond to nutrient and hormonal signal (e.g. leptin) and together, the two systems work together to regulate appetite, energy expenditure and importantly, body weight. Yet, we don’t have a complete understanding of the interplay of these neurons and a recent study published in Proceedings of the National Academy of Sciences aimed to shed light into this question, literally.

Using optogenetic techniques, neurones were activated using light. Together with neural activity mapping and brain transparency visualisation techniques, the researchers at the University of Michigan demonstrated the anorexigenic and orexigenic nature of neurons that express POMC or AgRP respectively.

In the study, the mice with activated POMC neurones stopped eating though they were starved 4 hours before feeding.

POMC is a gene that codes for stress hormones, therefore it makes as much sense as eating would probably be the last thing we want to do when we face a life-threatening situation. However, if both AgRP and POMC neurones were activated, the group of mice increased food intake. This suggests the neurons that put the brakes on eating are overridden by the neurones that promote eating. In other words, the ‘I must eat more’ mechanism is stronger than the ‘I think I will stop’ mechanism – that’s why we keep eating when we are full.

To explore how this was brought about, the scientists visualised the neuronal network in the brain that received protein signals from POMC and AgRP neurones. Results showed that the two systems have a different neuronal activation pattern, in which the insatiable mouse group

has a much broader and wider response area in the brain compared to the group where anorexigenic neurones were activated. To investigate potential mechanism of how the change of appetite is brought about, the scientists gave the mice naloxone, a drug that blocks opioid receptors. Results suggest the effect of increased food intake is likely to be mediated by the opioid receptor-signalling system, the same system that regulates sodium appetite (craving salty food) and aids in regulating pain.

All these interesting findings certainly help increase our understanding of the appetite control mechanisms, which could potentially target the pathway to up- or down-regulate our appetite, thereby treating issues like obesity. Whilst the use of pharmacologic treatment (naloxone) in the experiment suggested a slight possibility to

translate this knowledge into a medical treatment, the difference in mice and men means that factors such as stress and emotions were not investigated. Furthermore, as mentioned, the opioid receptor signalling system is also involved in other important features, hence, a ‘magic pill’ is not likely to be ready soon. Long-term effects should also be investigated before making any therapeutic claims.

To conclude, scientists have shown that over-eating is caused by an overpowering signal from the ‘please eat more’ neurones, which, in mice can be inhibited by drugs. However, more work needs to be done to understand the topic, as humans are greatly different from mice, especially in terms of psychology and experiences to social triggers. In the meantime, I guess willpower is all we have to stop us from overeating.



Why do we overeat so regularly? //Tanvir Logani

SCIENCE

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Moths at Midnight

Recent research from the University of York gives an insight into the night-time pollination activities of moths. A pollination service that may be of great ecological importance, which has been overlooked, until now.

SCIENCE

Photini Knogle

Science Writer

We all know that pollination is an invaluable process, critical for both the maintenance of ecosystems and continued agricultural production. With growing pressure on agriculture to sustain the inflating human population, the role of pollinators is becoming increasingly important. In spite of global declines

across many pollinating insect species, the conservation discussion tends to focus on day-time pollinators, in particular the plight of bees. However, recent research from the University of York has demonstrated that the night-time activities of moths may play a much greater role in pollination than we had previously thought.

Due to the technical challenges of observing nocturnal animals, moths are relatively understudied compared to day-time pollinator species. In the

University of York study, researchers genetically analysed pollen found on moths to characterise previously unstudied plant-moth interactions and identify pollen-transport networks within a UK agrosystem. In so doing they identified many plants that were not previously thought to be pollinated by moths and found that moths pollinate a number of important agricultural crops. These include potato, soya bean and oil-seed rape. Many moth-pollinated plant species are also known to

be pollinated by day-time insects. This may confer a selective advantage for these plant species if current pollinator declines continue.

Moth pollinators tend to travel greater distances whilst foraging compared to their day-time counterparts. Consequentially, they may facilitate plant-gene flow across a landscape and prevent the deleterious effects of inbreeding. The maintenance of genetic diversity through gene flow has important implications for a species evolution

and may improve survival under future perturbations in the environment – of particular note, climate change.

The contribution of moths to pollination services has previously been understudied. However, using genetic analyses this study has identified them as globally relevant pollinators. Consequentially, their conservation is of great importance, especially in the face of ongoing global declines in the numbers of pollinating insects. The total number of moths in

the UK is estimated to have decreased by around 30% since 1968, this has partly been attributed to habitat losses, light pollution and use of pesticides. The University of York study goes some way to prove that when discussing important pollinators for the maintenance of agricultural production, we should include moths, and therefore take action to prevent their further decline.

ICESat-2, NASA's new satellite to measure the melting of ice

SCIENCE

Marie Jones

Science Writer

On Saturday the 15th of September, NASA launched their newest laser, the ICESat-2, which stands for "Ice, Cloud and land Elevation Satellite". In orbit 500 km above our heads, the satellite's main mission is to measure the alarming evolution of ice

melting in the poles.

Since 2009 and the end of the first mission of ICESat, NASA had no spacecraft instrument capable of providing information such as the thickness of the ice in Greenland and the Antarctic. On board of the half a tonne satellite, two lasers, one of replacement, were installed. Each laser is divided into six beams to follow as closely as possible the slope of the surface of Earth. With

10,000 laser pulses per second, measurements will be taken every 70 centimetres on the trajectory of the satellite. Thanks to these very precise data, NASA aims "to estimate the annual height change of Greenland and Antarctic ice sheets to within 4 millimetres – the width of a No. 2 pencil." ICESat-2 records the time taken by the laser beams to reach the Earth and to come back to the satellite at a very precise spatial

location. Scientists are then able to calculate the height of forests, glaciers and sea ice.

Such devices are urgently required in today's global warming situation. The Arctic Sea Ice has indeed reached its smallest 2018 summertime surface area (4.59 million square kilometres) on September 23rd. This layer of frozen water floating above the Arctic Ocean extends during wintertime and naturally shrinks during summer. However, since the 1970s, the Arctic Sea Ice rapidly reduced by 54 000 square kilometres each year, going from 7.01 million square kilometres in 1980 to only 2.91 square kilometres in 2012! The same phenomena are observed in the Antarctic, where 3 000 billion tonnes of ice have melted since 1992, enough to rise the global level of the oceans by 8 millimetres! Hundreds



Arctic ice extent reached a 2018 summertime minimum on September 23rd // National Snow and Ice Data Centre



The ICESat2 // NASA

of millions of inhabitants living on coastal land are under the threat of sea level rising! The future measurements provided by ICESat-2 will supply more details to the world's leaders to orientate their policies in favour of sus-

tainable development and take action to prevent the Earth's temperature from rising by more than 1.5°C by 2022.

SCIENCE

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Nobel Season: A Summary of the Prizes for 2018

A quick tour of who's who and what's what in this year's greatest scientific achievements

SCIENCE

Lucy Rowlands

Science Writer

Last week was Nobel Prize season, and whilst it's not quite as glamorous as the Oscars, it comes with a lot of prestige and a chance to go down in history. These yearly prizes are awarded to those who make significant contributions in several categories outlined in the will of Alfred Nobel, with the three in science being given to Medicine, Physics and Chemistry. So, this week Felix Science will give you a rundown of the three science winners so you can sound cool and clever at welcome drinks.

The week began with the announcement of the Nobel in Physiology and Medicine, which was awarded to James Allison and Tasuku Honjo for the discovery of cancer therapy by inhibition of negative immune regulation, more commonly known as immunotherapy. The immune system is a powerful tool, and so di-

“Directing the immune system towards cancer therapy has been the dream of many scientists”

recting it towards cancer therapy has been the dream of many scientists for a long time. However, at that time the systems in place to regulate the immune system were still a bit of a mystery.



Donna Strickland is only the third woman to earn the Nobel Prize in physics // Wikimedia

James Allison's work focused on the catchily named CTLA-4, a protein involved in reducing T-Cell function. They developed an antibody that binds to this protein, inhibiting it and therefore increasing the immune response to a tumour. The results in mice were impressive, but many companies were reluctant to try it, as playing with the immune system is always risky business. However, eventually one company was brave enough, and this finally led to the development of Yervoy, an immunotherapy antibody for melanoma.

The second half of the prize goes to the discovery of PD-1, by Tasuku Honjo. This protein is similar in function to CTLA-4, and acts as another regulatory

system to keep T-cells in check. Honjo also developed an antibody for this protein, and nowadays there are several oncology treatments based on PD-1 in the clinic. Immunotherapy has been a revolution in cancer treatment and has saved the lives of many people. What is equally exciting however is that this revolution is still going. There are still papers coming out on this subject, and only time will tell how these will impact how we treat cancer.

This year's Physics Nobel went to 'Advances in Laser Physics' and was split, with one half going to Arthur Ashkin for the development of optical tweezers, and the other half going to Gérard Mourou and Donna Strickland for their work

in the development of high-intensity ultra-short laser pulses.

Optical tweezers are a somewhat futuristic sounding tool that utilise lasers to trap and manipulate particles. These take advantage of the ability of light to exert force or radiation pressure on an object, and it was with the advent of lasers that the ability to use this force became a possibility. Optical tweezers have been shown to be able to move atoms, whole cells, and even organelles within a cell, and they have a myriad of uses throughout science. The other half of the Nobel went to the generation of high-intensity ultra-short laser pulses by Mourou and Strickland. Whilst this sounds a lot less exciting

on the surface, they are vital for laser eye surgery and in laser machining. Mourou and Strickland created chirped pulse amplification by stretching the pulse in time and reducing the peak power, then amplifying the pulse, and finally recompressing the pulse in time resulting in large power pulses. This meant that pulsed laser devices became smaller and cheaper and opened up new areas of physics and led to development of corrective eye surgery.

Donna Strickland is the third woman ever to win the Nobel in physics, and her win has reignited the debate about recognising women in science. She is currently not a full professor and, until roughly 90 minutes after the prize was announced, she didn't

have a Wikipedia page as she wasn't deemed noteworthy enough. Considering 'Dusty the Klepto Kitty' made the

“Strickland is the third woman ever to win the Nobel in physics”

cut, that reason seems to be misjudged.

Finally, the Chemistry Nobel prize was announced, and this year half went to Frances Arnold for directed evolution of enzymes, and the other half to George P. Smith and Sir Gregory P. Winter for the phage display of antibodies and peptides.

SCIENCE

science.felix@imperial.ac.uk

Now, some of the more keen-eyed readers might be thinking ‘hang on, that sounds an awful lot like biology’, but since there’s no prize for biology, the major contributions in areas like chemical biology get lumped into the chemistry prize.

Directed evolution of enzymes applies evolutionary ideas to

producing enzymes that can do things that natural enzymes cannot. This involves taking enzymes and inducing a series of random mutations, and then weeding out the ones that are better at doing what you want and then doing the whole thing all over again. The original work tested this by producing an enzyme that

was able to function in a solvent system that would have destroyed the starting enzyme. Since then there have been a great many other enzymes developed, including modified lipases that break down fat in laundry detergents. Arnold’s own spinout company develops biopesticides through directed evolution of enzymes.

The rest of the prize is for the related technique of phage display. This uses bacteriophages, a virus that infects bacteria, to produce antibodies. Bacteriophages display proteins on their surface, and Smith worked out that they could produce any protein when the correct gene was inserted. Winters then used an evolutionary

method like the one developed by Arnold to produce antibody-based drugs. Today there are several antibody-based drugs on the market, and the list is growing every day.

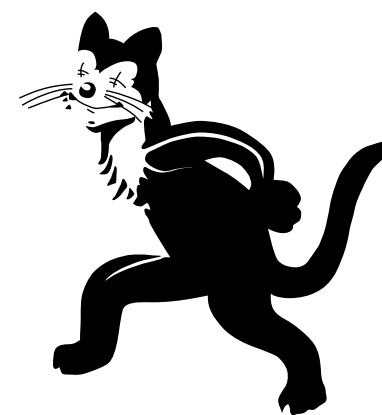
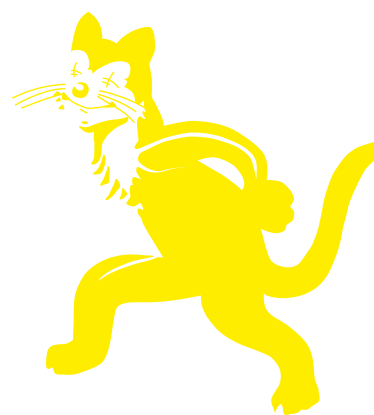
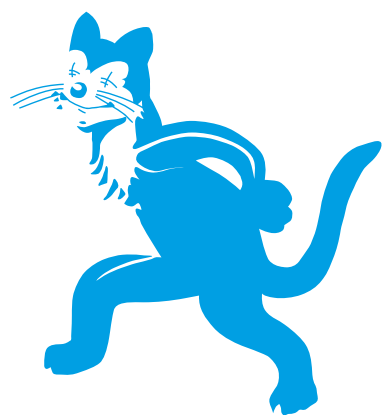
“The more keen readers might be thinking: hang on, that sounds an awful lot like biology”



Portraits of the 2018 Nobel Prize Laureates. From top left to bottom right: Donna Strickland (Physics), Arthur Ashkin (Physics), Gerard Mourou (Physics), Frances H. Arnold (Chemistry), George P. Smith (Chemistry), Sir Gregory P. Winter (Chemistry), James P. Allison (Physiology and Medicine), Tasuku Honjo (Physiology and Medicine)

// Nobel Media

Felix is recruiting!



We want you – yes, you! We’re looking for writers, photographers, editors, illustrators, reporters, computer experts and grammar nerds to join our team. No experience needed – we’ll teach you everything you need to know. If you’re interested, send us an email on felix@ic.ac.uk

Wishing You an Appy New Year in London

This week in the Tech section, we are reviewing some essential apps we hope will enhance your experience of living in London

TECH

Anonymous
Tech Writer

Whether you are new to London or you've always lived here, the collection of apps in this article consists of apps many Londoners use daily, and many more you may be unaware of. Either way, they are sure to help you out if you haven't used them before.

"Apart from being user-friendly, Monzo is also good for use abroad. For cash withdrawals under £200 a month, there are no fees"

Citymapper



Citymapper // Wikimedia

If you are new to London or even if you have lived here a while, public transport can be complicated.

While you can definitely get by reading Tube or bus maps, if you want to save some time, Citymapper is the way to go. The app provides you with live updates on buses and Tube lines, and calculates the fastest routes to any destination.

Additionally, you can see if there are any Santander bike racks nearby along with how many bikes/free spaces are available there.

Monzo



Monzo // Google Play

Monzo is a smart banking app, packed with useful features to help you manage your finances.

Once you open a current account with Monzo, they will send you a debit card, and you can also set it up on Apple or Android pay.

Any transaction carried out with Monzo will be automatically categorized, for example, into restaurants, shopping, or groceries. This makes it very easy to track your spending without putting in any effort.

Apart from being user-friendly, Monzo is also good for use abroad. For cash withdrawals from ATMs under £200 a month, there are no fees. Other spending can go over that limit without any charges.

Instapaper



Instapaper // Instapaper

Do you ever see an article you want to read later, and then just never come back to it? Instapaper allows you to save any article you are reading, and then it is downloaded in the Instapaper app. It's great for catching up on your reading during long Tube journeys or whenever you do feel like it.

Dojo



Dojo // iTunes

Dojo offers a solution to the problem of finding something to do in London, which shouldn't really be a problem considering there is always so much going on.

On Dojo, you can find a curated selection of upcoming events, things to do and places to visit and you are sure to find something interesting.

Whether you're looking for something to do during the day or places to go out at night, food, music, exhibitions

or just ideas for something to do on a rainy day, Dojo has you covered.

"Whether you're looking for something to do during the day or places to go out at night ... or just ideas for something to do on a rainy day, Dojo has you covered"

Student Pulse



Student Pulse // Student-PulseLondon

Working with renowned groups and institutions such as the Royal Philharmonic Orchestra and the Barbican Centre, Student Pulse brings you affordable tickets to see live performances of classical music.

All you need to do is download the app and register with your student ID. No discount codes are required after

doing this and tickets can be purchased directly through the app. Usually the prices range from £5 to £10. Have a look and you might find something you're interested in!

Dice



Dice // iTunes

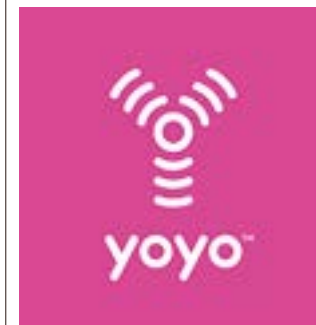
The aim of this app is to make buying tickets for festivals much easier. Tickets can be refunded and you are safe from having to pay more than you should.

"Tickets can be refunded and you are safe from having to pay more than you should"

Dice also offers recommendations for upcoming gigs if you feel like trying something new. If you allow it to access your Apple Music or Spotify, the app tailors its recommendations to your music taste.

Using your location, Dice can also keep you up-to-date on events happening in your area, such as across the many clubs in London.

YoYo



YoYo // YoYo Wallet

For regular customers at the various catering outlets around campus, YoYo is an app definitely worth giving a go.

You have probably heard the name if you've ever bought lunch here. YoYo is essentially a kind of loyalty program.

"For regular customers at the various catering outlets around the campus, YoYo is an app definitely worth giving a go"

If you pay for food via YoYo, you will receive points which can be redeemed to get (for example) fruit, chocolate bars or even a smoothie depending on how many points you have.

Additionally, there are loyalty cards on the app, so, for example, your 10th hot drink might be free.

FILM

film.felix@imperial.ac.uk

BlacKkKlansman: A Klever koncious Komediy



"As enjoyable a film you could possibly get about the Ku Klux Klan—which in this case is really enjoyable" // Universal Pictures

FILM

BlacKkKlansman



Dir: Spike Lee. **Script:** Charlie Wachtel, David Rabinowitz, Kevin Willmott, Spike Lee. **Starring:** John David Washington, Adam Driver, Laura Harrier.

Sung Soo Moon

Film Editor

Ah, the seventies — a vibrant era of yesteryear, whose key highlights include the heinous hairdos, sleaze-core fashion, disco music, and of course, the racial tension between white and black peoples of America. However, *BlacKkKlansman* is far from a period piece, as director Spike Lee embellishes what is essentially

a buddy-cop movie into an African-American nightmare.

This is the story of Ron Stalworth, (John David Washington) who was the first black police officer in the Colorado Springs, Colorado Police Department. When Ron spots an advert in the papers about joining the Ku Klux Klan, he telephones them pretending to be a white supremacist. Ron

successfully convinces them over the phone, and when it comes to meeting them in person, his colleague Flip Zimmerman (Adam Driver) fills in as Ron-the-white-supremacist counterpart. It's quickly evident that the Klan have much darker intentions than the seemingly non-violent front, and it's up to Ron to prevent an impending disaster.

BlacKkKlansman is based on an absurd true story; of course, there are some important dramatic liberties that drive the plot forward, but the central idea of a black man becoming a member of the KKK is preposterous. As serious as the subject matter is, this central conceit is an almost humorous one; something out of a satirical comedy sketch—and the film doesn't shy away from this at all. There are plenty of comical moments that throughout the film that provide breathing space through, and on the whole it does work smoothly enough.

It's hardly surprising that Jordan Peele is credited as a producer, as his fingerprints are all over *BlacKkKlansman*; the fine balance between humour and horror is handled robustly. However, *BlacKkKlansman* is surprisingly toothless when it comes to the portrayal of racism and the KKK. There's plenty of jeopardy, but it's explored in a safe environment and not as powerful as it ought to be.

Having said that, there are hugely effective moments throughout the film. There is a heart-stopping scene involving white policemen misreading a situation that is completely tragic but relieves the tension with humour. The final montage of scenes is utterly haunting and the parallel-cutting between the Klan and the black activists is poignant. What you don't get is a film about the KKK, but a socially conscious comedy that packs a punch.

BlacKkKlansman is as enjoyable a film you could possibly get about the Ku Klux Klan—which in this case is really enjoyable (if that's not too politically incorrect to say). On the one hand, it juggles the weight of a racially volatile period of history and on the other, it ticks all the right boxes for the laughs. When you boil it down, its skeleton resembles a simple fish-out-of-water comedy, albeit a very well executed one. It's not *Get Out*, but then again, what is?



Adam Driver is having some serious regrets about his Halloween costume this year // Universal Pictures

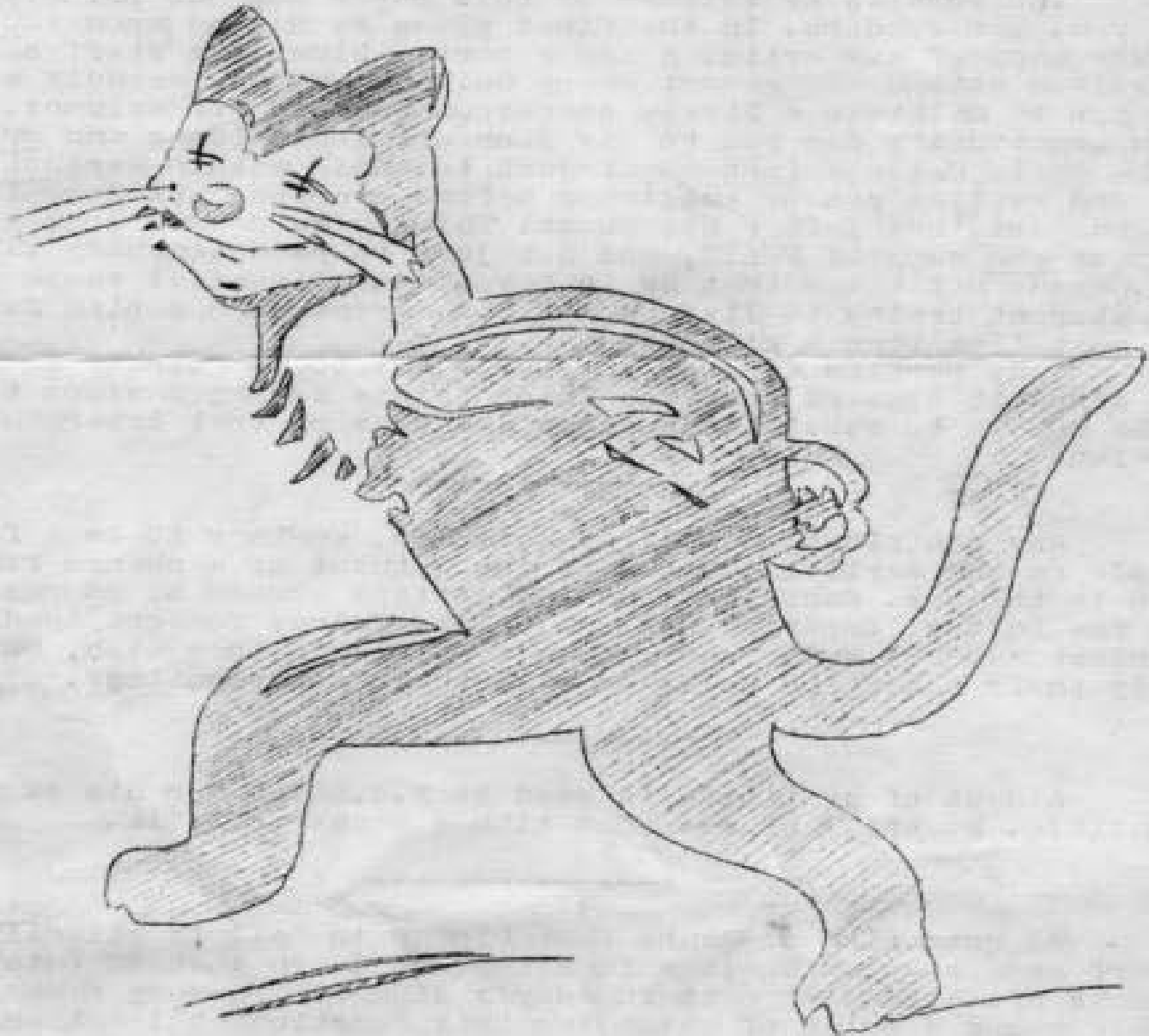
CRETE C4 EXPEDITION



Union hills sch - Locker 25 & 29

FELIX

FRIDAY DEC 9H.



EVERY FORTNIGHT

30



Felix at 1700



THE STUDENT NEWSPAPER OF IMPERIAL COLLEGE LONDON



Autumn
Elections¹⁸

Use your voice

Take charge of your Imperial experience
Choose your Reps

VOTE

A stylized illustration of a hand in a blue sleeve placing a white ballot with a black checkmark into a grey ballot box. The illustration is set within a circular yellow background that serves as the letter 'O' in the word 'VOTE'.

imperialcollegeunion.org/vote

Voting opens
noon, 15 October

Voting closes
noon, 19 October

MUSIC

music.felix@imperial.ac.uk

REDUXER: Turning Water Into Wine

Where RELAXER was a fairly uninspiring mark of alt-J running out of new ideas with a sound that almost embraced their TV-ad music status, alt-J's REDUXER has taken the same material and reworked it into something masterful.

MUSIC

REDUXER



Artist: alt-J. **Label:** Infectious Music; Atlantic Records; Canvasback. **Top Tracks:** 3WW (feat. Little Simz); In Cold Blood (feat. Pusha T); Adeline (feat. Paigey Cakey and Hex). **For Fans Of:** Col3trane; Gorillaz; Loyle Carner; The Alchemist. *43 minutes*

Guthrie Ruby

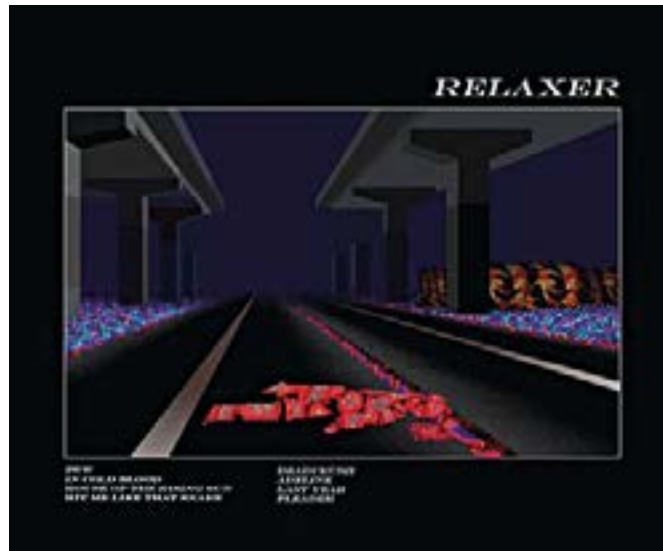
Music Writer

Last June, the Leeds based indie rock band alt-J released their 3rd studio album, *RELAXER*. And it wasn't good. Don't get me wrong, I love alt-J just as much as the next guy; 'Left Hand Free' will forever get my feet tapping and my air drums rocking. But *RELAXER* was like looking in a fun-house mirror of the band I loved so much. The whole thing just felt off, the slow calm songs droned on, Joe

Newman's vocals only fit into a few of the songs well and aside from 'In Cold Blood' and 'Deadcrush' I never felt engaged – more like bored.

So I had basically given up on alt-J, and in fact was half pleased when they didn't win the Mercury Prize – it would have been undeserved. Then last week *REDUXER* was released. And I adore it. Who would've thought an album made up of hip-hop remixes of tracks from *RELAXER* would be possible, let alone great.

The moment Little Simz started rapping over 3WW it changed from a watery mess of a song to something dark, sinister and just generally fucking awesome. Little Simz's flow is low, laid back and drives through the song – the kind of thing you'd listen to late at night feeling like a bad boi. I was already pumped and it was just the first song. The rest of the album delivers many more rap features from fantastic



You vs. the man she tells you not to worry about // Canvasback

artists and producers like Pusha T, Goldlink and Danny Brown to name a few.

The songs I liked from *RELAXER* have only been improved upon, but it's the previously wishy-washy tracks that really stand as testament to alt-J's ability to regroup and rework. 'Hit Me Like That Snare' is one of the tracks that is remixed not once but twice on this album, chaotic and dissonant with Jimi Charles's

passionate vocals in the first but smooth and funky with Rejjie Snow's laid back rapping in the second. Each are much better than Joe's vocals in the original. 'Adeline' was originally a standard safe alt-J song but here it's been morphed into a chill trap banger with an alt-J twist (good name for a cocktail?). If that doesn't entice you I don't know what will.

Though each song is

"All the while a sweet brew of solid beats and airy instrumentals mix in the background giving the album a unique feel"

flipped on its head, the album stays true to its title

in that you can always recognize the original. The choruses are usually kept, while the verses are given to a feature. Filling the verse space with a rap feature eliminates the watery and directionless feeling the tracks had in the original. All the while a sweet brew of solid beats and airy instrumentals mix in the background giving the album a unique feel.

The album still has its problems. I still hate 'House of the Rising Sun', but it can't be easy to turn something that bad into something good. Also, the album lacks any real direction or message. But how much can you expect from these artists when they're separately remixing tracks of an album they didn't create. *REDUXER* isn't really a proper album or a serious project, it's more just a bit of fun (done well).

When the album was dropped, Joe Newman posted on Facebook talking about how excited they were to be working with global hip-hop artists who have influenced them

so much, and their passion shines through. I would love to see more music like this from alt-J, and while I'm not expecting them to switch entirely

"I'd hope that as the band progresses, we see more of the originality they've shown us on REDUXER."

to hip-hop, I'd hope that as the band progresses, we see more of the originality they've shown us on *REDUXER*. I'm truly impressed by this miracle transformation.

So while we wait semi-tentatively for whatever alt-J have planned next, at least we can sit back and enjoy this delicious concoction they've served us.



alt-J, Pusha-T, and Twin Shadow. Who would've thought it // consequenceofsound

MUSIC

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Who was the summer ball headliner again?

It wasn't always like James Hype or the Stickmen. In this, the 1700th issue, we take a look through the Felix archives and dig out some times when great music came to Imperial.

MUSIC
Adrian LaMoury
Music Editor

FREAK OUT TO THE
PINK FLOYD
 IMPERIAL COLLEGE OCT. 26
 Tickets 10/- or 17/6 Double.

DEEP PURPLE AND FRIENDS — a critical appreciation

The second I.C. Carnival Concert held recently before a capacity crowd featured the appearance of singing with...
 something new to the music of...
 During these 'Sweet Sarah'...
 In at last and finally...
 These followed an explosion...
 Deep Purple on stage



Deep Purple on stage

lou reed

It was a night of true Western Dec...
 he became a legend in his own lifetime...
 For the uninitiated, Lou Reed left...
 on the scene early this year when he cal...

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versions. To people who...
 loved it anyway...
 The songs from the...
 ch better than the early...
 of the most accomplished session men in Britain studio group. "Sweet Marie", the latterday Reed

Queen's first concert honoured in Metric!

Tim Achuzadah Editor-in-Chief

Queen were at Imperial in Metric on...
 The event was greeted with much...
 The event was a music Heritage...
 I remember it very distinctly because...



ELTON JOHN in concert 24th February



To one of the largest audi...
 Urban Chorney called a...
 And they might have...
 And as an on to Hank...



FLOYD at IC

Following their successful...
 They are probably the...
 They are probably the...
 They are probably the...
 They are probably the...

Minimum to maximum, ambient to aggressive

MUSIC
LIVE 2002
 ★★★★★

Artist: Mika Vainio; Ryoji Ikeda; Alva Noto. **Label:** Noton. **Top Tracks:** Movements 2, 4 to 11. **Fans Of:** Fennesz; Vladislav Delay; Ryuichi Sakamoto. **48 minutes**
Suraj G
Music Writer

Aggression has, for the most part, been a matter of force or damage. They yell, the guitars scream, the drums roar. All a product of man's basest tendencies, a primitive release. Reining it back, *Live 2002*, is in many ways a controlled exploration of the impulses preceding the violence. Its pulsating sine waves and pricking

clicks dig themselves into its listener's skull. Scoring the ascent to man's breaking point, narrating the build-up to a night of transgressions and misdeeds. The early 2000s were witness to a new era of minimal electronic music characterised by a stripped back electronic sound and glitchy textures. Spearheaded by labels like Raster Noton,

"A true work of art and a labour of love, birthed from spontaneity, yet controlled, measured, and sinister"

the movement failed to truly crystallise into anything substantial, with near misses we would see in releases like Ikeda's *Dataplex* or Ripatti's *Entain*. Or so we thought. A decade and a half later, we have what could be considered the scene's opus, performed live for a residency in The Baltic Centre For Contemporary Art, all this while tucked away in a dank corner

somewhere. *Live 2002* blends minimal techno, glitch and microsound in a truly gorgeous and yet simultaneously unnerving method. Over the course of 11 movements, it presents itself as a true work of art and a labour of love, birthed from spontaneity, yet controlled, measured, and sinister.

ARTS

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Mrs Dalloway Brought to the Stage

This ambitious adaptation of Virginia Woolf's novel aims high, but fails to capture the charm of the novel.

ARTS

2018



Where? The Arcola Theatre

When? 16th Sept – 20th

Oct

How Much? £15-£22; £10 students

Vaishnavi

Gnananananthan

Arts Editor

This adaptation of Virginia Woolf's 1925 novel is clearly a labour of love, and an ambitious one at that. *Mrs Dalloway* is one of Woolf's best-known works, and arguably one of her best. In 1920s London, Clarissa Dalloway prepares to host a party for her wealthy friends. On the same day, First World War veteran Septimus Warren Smith is urged by his wife to seek help for his psychosis from Sir William Bradshaw, a wealthy doctor, and part of the upper-class society to which Clarissa belongs. Although the events of the novel take place over a single summer day, it encompasses a myriad of characters and perspectives across different locations, with references to many events in the

"The actors are fantastic, clearly the best part of the production"

past. It's a busy novel to say the least, and part of what makes it such an ambitious undertaking.



Guy Rhys, Sean Jackson, Emma D'Arcy, Clare Perkins and Clare Lawrence Moody in *Mrs Dalloway* // Tristram Kenton for *The Guardian*

Mrs Dalloway was also deeply personal for Virginia Woolf. Septimus' post-traumatic stress, his visions of his dead friend Evans and the gradual decline of his mental state are widely believed to echo Woolf's own life. Virginia Woolf herself suffered from psychosis and there is a hint of her experience in Septimus and his struggles.

Woolf crosses frequently between the characters, with as much a focus on their thoughts as their actions. And this is one of the things that is so difficult to translate to the stage: the bulk of the novel is taking place in the characters' heads. Director Thomas Bailey tries to capture this in his adaptation – the actors talk and interact with each other, but then speak their characters' inner thoughts into a dictaphone. It's quirky and it works, but soon it starts feeling like

an overused gimmick. There are other little touches that seem to be an attempt to be clever or relevant, such as the use of an Oyster Card to represent a ticket and a Metro newspaper, but they don't seem to be part of any unifying vision and just feel like odd touches that add nothing, and conversely distract from what is happening. The final scene, a party, is played out as a press conference, with the actors sitting in a line, alternating characters. It's one of Thomas Bailey's best decisions with this adaptation as it heightens the feeling of absurdity that pervades the scene.

One of the big draws of *Mrs Dalloway* is Woolf's language, and playwright Hal Coase's adaptation of the text maintains her flair for the poetic and her beautiful descriptions of London. It's a disappointment though that they are merely words read out by

the actors and not represented on stage. The set is minimal; a single blue board serves as the only backdrop for a great part of the play. The bustle of London, the grandeur of Clarissa's life – there's too much that this play asks you to imagine for such a visual medium. The Arcola Theatre's Stage 2 is also a tiny space, and one that doesn't suit this production at all. *Mrs Dalloway* needs distance and magnitude. Instead it feels cramped and claustrophobic, the actors crossing each other too often – everything feels too close.

The actors, however, are fantastic, clearly the best part of the production. Their enthusiasm gives you the sense that this is a real passion project for everyone involved. And really, no cast could have done better than those chosen by Thomas Bailey. Five actors play over

20 different characters, but somehow manage to capture the essence of each one. Claire Perkins is fantastic as the titular character, at points graceful and charming as the perfect hostess, but also capturing Clarissa's moments of vulnerability. The real stand-out performer though is undoubtedly

"The overall result is something of a mess, a flurry of words that doesn't quite take shape"

Clare Lawrence Moody. Her takes on Clarissa's charming old friend Sally and the drab Mrs Kilman are both excellent and

intense. When everyone is on stage, it's her that your eyes are drawn to. That isn't to say that the rest of the cast are weak – far from it. Guy Rhys is a convincing Septimus and Emma D'Arcy is great as his distraught wife Rezia.

The overall result of the play is something of a mess, a flurry of words that doesn't quite take shape. The die-hard Virginia Woolf fan will certainly find things to appreciate, but there's not a great deal here for the casual viewer. *Mrs Dalloway* just doesn't translate well to the stage. Hal Coase's writing isn't bad, not by a long shot, but it's clear this isn't the medium for *Mrs Dalloway*. Your time would be better spent picking up a copy of the book.

ARTS

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The Funny, the Painful and Everything in Between

A Funny Thing Happened on the Way to the Gynaecologic Oncology Unit at Memorial Sloan-Kettering Cancer Center of New York City *brings together two unlikely strangers in the morbid setting of their mothers' cancer ward, only for them to connect in a way neither expects.*

ARTS

2018



Where? The Finborough Theatre

When? 2nd Oct – 27th Oct

How Much? £20; £18 students

Jingjie Cheng

Books Editor

This is what my mother and I like to talk about," says Karla defensively, as Don shouts at her from across the flimsy hospital curtains to shut up. "Yes, but this is a hospital!" Don retorts. Karla, an aspiring stand-up comedian, had been practicing permutations of lines like "I have been single for so long, I have started fantasising about my vibrator." Not appropriate for a hospital room with two women suffering from cancer, Don thinks.

This initial dismissal of humour in the opening lines sets the scene for the subsequent exploration and observations of the role of humour in pain and suffering in Halley Feiffer's new play. *A Funny Thing...* follows the relationship between a young stand-up comedian and a middle-aged man in the throes of divorce, brought together in the same hospital room where their mothers are being hospitalised for cancer. Immediately, the juxtaposition between Karla's raunchy jokes and the air of death in the hospital setting becomes clear, and it is this relationship that the intermission-less, 80 minute play goes on

to explore with wit and tenderness.

The antagonism between the two visitors is broken by Marcie, Karla's mother, who croaks "She's dead!" as the conversation between them turns to Karla's sister. Karla bursts into uncontrollable laughter, while Don stands awkwardly, unsure of how to respond. The timing of her mother's comment tickles Karla, despite the tragedy of the situation. Gallows humour is a way for Karla to deal with the pain, pain which bursts through the surface and reveals itself when, much later, she talks about her sister's death with her mother.

Indeed, in the midst of Karla and Don's outwardly witty conversations and flippant lines, we learn of the difficulties that each is in, and how complementary these problems are. Karla is poor and just starting out, but confident and self-assured in the direction she will go. Don made his fortune from a tech start-up that he has no personal interest in, suggested by his wife who is about to leave him. He first appears dressed "like a homeless man" despite his wealth, an outward manifestation of the mess his life is in, and talks with an air of resignation. As might be expected, Karla's prickly nature hides a backstory – one that is revealed when Marcie awakes, and puts her down with every comment she makes.

As with any romantic comedy, two characters that are initially antagonistic must end up



Cariad Lloyd, Kristin Milward, Cara Chase and Rob Crouch in *A Funny Thing Happened...* // Tristram Kenton

together. Karla reveals a moment of weakness being upset at how her mother treats her and her sister's death, and Don's tender response suddenly explodes into one of the most visual and ludicrous sex scenes I have seen on stage. While slightly unnecessary, it was certainly (perhaps awkwardly) funny, and took the connection between them to a graphic, symbolic level.

This connection that Don and Karla experience is a shared acknowledgement of each other's suffering, that despite their very different life circumstances, they are brought together in shared grief for their mothers' suffering. What the play does well is that it does not pretend that jokes and humour are so that one can "smile through the pain" – it is deeper than that.

Rather, it is an observation that humour is the thread that allows for genuine human connection, that it is a medium for common understanding. In fact, sometimes it might be difficult to distinguish humour from pain. When Don's mother Geena dies, he says tentatively to Marcie that he found his situation then "funny". "It's not funny," Marcie replies. "What you feel is relief that your mother is dead, not that it is funny."

Cariad Lloyd is brilliant as Karla, balancing the self-assurance of youth with her insecurity, while delivering her comedic lines well. Rob Crouch is a suitably scruffy Don, and carries the mid-life crisis aura well. Kristin Milward makes a brilliantly acerbic sick mum, and while Cara Chase, as Geena, gets only a few

lines in the play, she does her part well. The intimate setting and importance of dialogue means that one's experience could be very dependent on the cast, and I'm glad to say that this small cast has delivered excellently. The setting of the Finborough Theatre is

"Humour is the thread that allows for genuine human connection, a medium for common understanding"

perfect, a small, intimate space above a pleasant pub. One almost feels like the audience fits into the hospital room, and can partake in the interactions between strangers, just as how Don and Karla have.

This play is a comedy, but comments on very real issues of city life, from Don's son's drug problems to class differences between the two. Ultimately it celebrates human connection – the shared suffering, but also shared laughter. It is tender without being heavy, hilarious and witty without being slapstick, and definitely worth a watch.

GAMES

games.felix@imperial.ac.uk



Felix's Gaming Section wants you!

Wanting your voice to be heard on all things game related? Up to date on gaming news? Want to write for Felix? Then read this article and see if you are up for the task!

Games

Anthony Onwuli

Games Editor

Connor Winzar

Games Editor

Hello from the Games editors, The Games editors not writing about games? Preposterous! This isn't the content I expect in my *Felix* Newspaper! Alright, ease the frothing at the mouth and hear us out, I know it's a strange concept but we've decided that rather than hog the gaming section we should open our inbox to the student public. I know, risky decision on our part, but we'll make it work ... hopefully (inb4 dumpster fire). Deviating from future regrets and bad decisions, we're here to offer you the grand opportunity to vent your opinions on the latest and greatest games,

boardgames or otherwise as well as qualms with the gaming industry. Do you think you have what it takes to write for Felix's gaming section? Then read this article to see if the shoe fits, as you may not be cinderella but you may be what we're looking for in a writer!

"Do you think you have what it takes to write for Felix's Games Section?"

What we are looking for in our articles?

Now as good as you may be at writing articles, we're looking for material that is up to date and covers recent games,

gaming news and events: and on the odd occasion we may demand pictures of Spider-man. Articles can also discuss themes and topics regarding games rather than just games themselves, e.g. "The impact of Atari games on modern day pop culture", "Has the boss rush genre reached its limit". Material similar to this is appreciated, but it must come with well reasoned points and evidence. Also under our remit is boardgames, so if there's an absolutely fantastic recently released board game that you would like to pour your heart out over in written form, then just send it our way. Now what do we mean by recent? Predominately that is within 3 weeks or a suitable timespan that provides it with some relevance (looking at you people who want to review Monopoly and its friendship destroying tendencies!)

What we are looking for in our writers?

Other than degrees in English literature and creative writing from Cambridge, we're looking for writers who are passionate and are ready to put said passion on paper. Passion being a loose term which translates to "please do not send us an article that is decorated with your fan fic, I don't care how marketable your shipping skills are, Donald Trump and Putin shipping is forbidden"

"We're looking for passionate writers who are ready to put said passion on paper"

Now we're no harsh critics to articles and neither are we requesting you send in your article in LaTeX format, however we do expect people to have at least read through their article at least once before sending it through. This so we can enjoy something coherent to read and editable without affecting the original content.

What you get out of this?

Just like us, you don't get paid, but you do have the opportunity to have your name featured as a writer for Felix and also chill with us sometime as we layout and set up your article.

How do you get in touch?

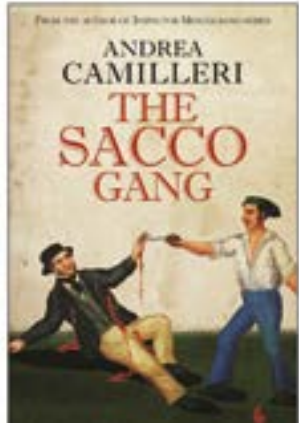
You can contact us through our email - games.felix@imperial.ac.uk . Be warned we can only put so many articles in one Felix issue, so if it doesn't turn up in the upcoming issue it may turn up in the next.

BOOKS

books.felix@imperial.ac.uk

A family against the Sicilian Mafia

Andrea Camilleri, author of the Inspector Montalbano series, writes about a family pit against the Sicilian Mafia of the early twentieth century in The Sacco Gang.



BOOKS

Bayan Al-Bulushi

Books Writer

Imagine, if you will, Sicily of the early twentieth century; an island whose main source of income is agriculture, its residents mainly peasants. Against this backdrop, we are introduced to the five Sacco brothers, who are part of an honest, hard-working, recently landed family. Their father, Luigi, has made his money by mastering the grafting of Pistachio trees. One day, they receive a letter from the Sicilian Mafia, demanding they pay for their ‘protection’. Luigi commits an unthinkable act: he burns the letter and refuses to surrender to the demand. That is when all of the family’s troubles begin.

The Sicilian Mafia, active for some time in their town, has permeated through the very fabric of society, redefining its culture and accepted norms. When anyone receives such a letter they usually capitulate. Rarely do the Mafia run into

obstinate fools, and when they do, another letter and a warning are sent – such as the burning of fields or, if that does not yield a satisfactory result, the death of a close family member. But the Sacco family does not succumb to the pressure, instead resorting to the law at every incident. The police are helpless, even shocked that the family would not simply give in to the demands of the Mafia. They essentially offer them no protection and cannot prosecute any of the suspects, despite their confidence in the brothers’ claims, due to a convenient ‘lack of evidence’.

The family is forced to take measures to ensure their safety, moving out of the countryside to a nearby town, arming themselves to the teeth during every visit to their fields. However, matters soon take a turn for the worse with the Mafia. Viewing the Sacco’s defiance an intolerable offence, they try to engineer events such that the Sacco brothers are convicted of crimes they themselves committed. Soon the situation becomes so unbearable that some of the brothers become fugitives.

With the political changes occurring in Italy, the brothers hope that the new Fascist government of Mussolini would wage a war against the Mafia. An unlikely event, since some of the Mafia members were big donors to the party, that comes to pass because of a fallout between the two. It is soon clear, however, that the new Prefect will stop at nothing to apprehend the Mafia, even those who

actively fought against it like the Sacco brothers. Their safety is compromised further and there is no recourse for them but to hand themselves in.

The narrative takes on, at times, a biographical nature, using excerpts of one of the brothers’ writings to expound on the events, which are based on a true story. The first half of the novel was a thrilling page-turner; I was so engrossed in the Saccos’ struggle and their uncertain future. The latter half though was not nearly as intriguing; it mainly dealt with the arrest, trial and imprisonment of three of the brothers.

The setting of the novel was what first drew me

to it, and, in that respect, it did not disappoint. The lifestyle, culture, and sudden political upheavals serve as anchors that do not totally overshadow the story itself. It was an interesting insight into Sicily of the 1920s and the culture of the Mafia, which was not extinguished by the imprisonment of most of their members during the Fascist era. Camilleri uses a quote from *A History of Sicily* to explain this: ‘Had the Mafia been an association instead of a way of life, [the Prefect] might have been able to suppress it for a while, but its complex social and economic causes could never be removed in such a short amount of

time, and using only such methods.’

Camilleri’s writing

“The first half of the novel was a thrilling page-turner; I was so engrossed in the Saccos’ struggle and their uncertain future”

leaves much to be desired. His attempt at transforming the true historical events into a story failed, in my opinion. Instead, it took the tone of a reference text almost, especially towards the middle and the end. I believe that, were Camilleri not a big name thanks to his *Inspector Montalbano* series (which I haven’t yet read), this novel would not have been translated into English. Suffice it to say that, by the end of the book, I was less than enthusiastic at the prospect of a foray into his most famous works.



Andrea Camilleri // Fabrizio Villa

FOOD

food.felix@imperial.ac.uk

2 Girls, 1 Dessert

Follow the Felix Food Editors, **Eva** and **Julia**, on another adventure! Join their quest for London's most Instagrammable, but equally as enjoyable, dessert places.

FOOD

Eva Tadros

Food Editor

Julia Dąbrowska

Food Editor

Watching all those Food Insider videos on Facebook on a mundane afternoon undoubtedly leaves us all drooling, daydreaming about those Instagram-worthy desserts – just think of the food envy your friends will experience when they see a boomerang of that food! So naturally, you tag your friends saying, “we should go!”, knowing well it’s probably not going to happen because something always comes up – your bank account is a little broken after all those nights out, one of you is too busy at the library, or like us, maybe you just prefer to spend your time napping.

However, one day, my friend and I decided to set out on a quest to try each and every dessert place we came across on social media – no better way to spend your student finance, right? We decided to hit up the capital’s foodie hotspot first – Westfield London. From the famous Mr. Pretzel cinnamon sugar pretzels to bubble waffles to ice-cream and pancakes, this place was absolutely packed and buzzing on yummy, picturesque desserts – all just ready for us to eat and eat and eat!

First place on our dessert hit list was Naked

Dough. Located on the first floor, this little cookie dough cafe stall could not possibly be missed with its lively setup and bright, vibrant display. The cookie dough flavours had us both baffled, with such a wide range to choose from for the tubs and dough cones they did, including lotus biscuits, mud bath (aka death by chocolate), Nutella, ‘Unicorn Food’ (marshmallows and sprinkles), and a very tempting salted caramel and honeycomb. There was also plenty of toppings which you could mix-and-match. The smallest size, costing just under £5, we thought a bit pricey but seeing the massive portion a girl before us received, we changed our minds (do not get a larger size than the normal, or you will die). Though all of that was fantastic, we were there for actually eating the food, and with no due hesitation, we decided to order the biggest thing we could find – the Dough Freak. Two scoops of mouth-wateringly soft ice-cream stuffed in-between two scoops of *arguably* the best cookie dough to ever exist, plus free unlimited toppings. One taste of it and we were questioning reality – surely this was what actual heaven felt like?

After how successful our first Westfield trip was, we had high expectations for our next dessert adventure, and naturally we had to hit up Bubble on Waffle, one of the most Instagrammed dessert places in London – but was it going to live up to the bar set by Naked Dough? Though we didn’t have as

many flavours to choose from, we still had quite the predicament because who could really choose between a heavenly hazelnut Ferrero Rocher, strawberry shortcake goodness and a blissful banana split? Also, I mean, who could resist the combination of a hot waffle with the cooling ice cream centre? At roughly £7 per waffle, this was fairly expensive, but we were hoping it would be worth it. Unfortunately, the taste and practicality did not match the waffles’ looks; the waffle was soggy and began falling apart after a few minutes, and the ice-cream didn’t quite taste of the flavour it was meant to be. All in all, a bit bland really, but at least we got some pretty cool photos out of it – you win some, you lose some, eh?

“From the famous Mr. Pretzel... to bubble waffles... this place was absolutely packed and buzzing on yummy, picturesque desserts – all just ready for us to eat and eat and eat!”



Not fazed by the shortcomings of the bubble waffle, the last trip was to a

donut store in Soho called Doughnut Time. The size of the shop was tiny; basi-

Naked Dough // Eva Tadros
cally a stand on the street (the only option was to

FOOD

food.felix@imperial.ac.uk



Bubble on Waffle // Eva Tadros

Kinder Bueno doughnut filled with Nutella and topped with, of course, Kinder Bueno. Looking at the assortment, we were extremely impressed – not only did all the options look mouth-watering, but there were multiple (!) vegan options to choose from, such as Red Velvet! Although the price was £4 (for a doughnut?!), the flavour did not disappoint. The dough itself was pretty classic, but the special toppings really made it a delicious treat. The amount of frosting and icing on top was also very generous – we definitely needed a LOT of water after to deal with the sugar overload. Worth the £4? Not on a regular basis, but definitely worth a try at least once or twice to test out some cool flavours.

“All in all, a bit bland really, but at least we got some pretty cool photos out of it – you win some, you lose some, eh?”

This venue definitely left us looking for more dessert places through social media for the future – after all, 67% success rate is pretty good (it’s almost a First, am I right?)

“Looking at the assortment, we were extremely impressed - not only did all the options look mouth-watering, but there were multiple (!) vegan options to choose from”

The conclusion? Social media, although it is known for popularising aesthetic and not necessarily delicious places, also showed us quite a few gems that can be discovered too. With more and more places opening up at Westfield every day, this is definitely our number one place to watch, but who says you can’t look

elsewhere as well? Stay tuned for future updates on more yummy food places to try – and a timeline of how much our waistlines expand...

“This venue definitely left us looking for more dessert places through social media”

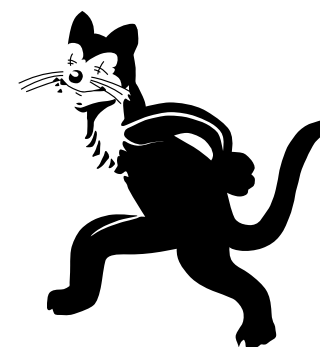
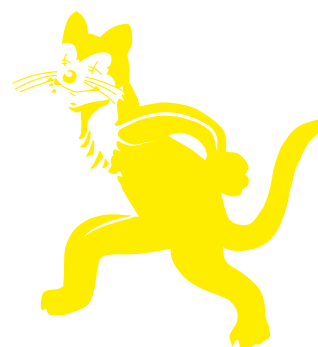
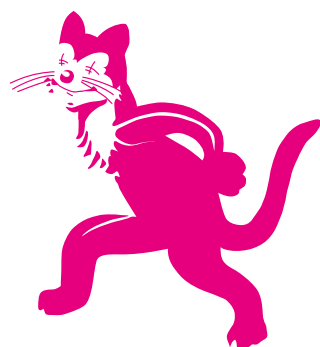
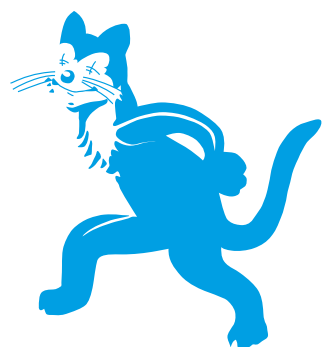


Doughnut Time // Julia Dąbrowska

get takeaway doughnuts, no place to eat-in) and we didn’t really know what to expect, although a queue was present and growing (a queue for any kind of food is always good, right?) As we got nearer, our first glance at the display made all our doubts disappear. From Percy Pig to Oreo to M&M

donuts, every donut had a ‘theme’, both aesthetics and flavour wise. The Percy Pig donut was pale, with pink frosting and of course a couple Percy Pigs on top, while the Oreo one was made of black dough and was encrusted with broken Oreo chunks. There was even filled doughnuts, such as the

Felix is recruiting!



We want you – yes, you! We’re looking for writers, photographers, editors, illustrators, reporters, computer experts and grammar nerds to join our team. No experience needed – we’ll teach you everything you need to know. If you’re interested, send us an email on felix@ic.ac.uk



Autumn
Elections 18

VOTING OPENS

Noon, Monday 15 October



Autumn Elections

Our Student Rep candidates have now put themselves forward to stand in the Autumn Elections, and soon it will be time for us to decide who will represent us on matters of education and wellbeing, who will take our concerns to Union Council, who will lead our Constituent Unions and who will be our LGBT+ Officer.

Any full member of the Union can vote; first-years, Postgrads and everyone in-between. Who you elect will have the important responsibility of influencing changes and decisions that affect you, so it's important that you get to know your candidates and what they plan on focusing on if elected. You can find this out by reading their manifestos at imperialcollegeunion.com/elections.

- Voting opens: 12:00, Monday 15 October
- Voting closes: 12, Friday 19 October

This is our time to take charge of our Imperial experience, so get to know your candidates today: imperialcollegeunion.com/elections.



Free skills workshop

In keeping with our mission to help every Imperial student develop their full potential, Imperial College Union continues to offer free skills workshops to complement the academic curriculum.

The six skills workshops, offered through Imperial Plus, are open to all students and are free to attend. They're a great opportunity to explore topics related to leadership, management and self-awareness, all of which are a boon to our employment prospects.

The two-hour workshops are delivered by a team of Student Trainers in South Kensington and Charing Cross. Space is limited so sign up quickly.

Imperial Plus is only one plank of the Student Development offer at the Union. To sign up for workshops or learn more, visit imperialcollegeunion.org/studentdevelopment.

Union Council

Imperial College Union is a democratic organisation and our students take lead on the important decisions that we make.

Union Council is the highest student decision-making group at Imperial. Its members are drawn entirely from the student body and their role is to make policies, hold the Union to account, and to support and scrutinise our Officer Trustees. Once a month during term time, our Officer Trustees join Council Members from our Constituent Unions, Academic and Wellbeing Representation Networks, Management Group Chairs and Liberation Teams, as well as elected Undergraduate and Postgraduate representatives of students from every faculty of Imperial College London.

Any student of Imperial can propose a topic of discussion and come along to Union Council to contribute to the discussions which take place. Find out how you can get involved at imperialcollegeunion.com/unioncouncil.

GRADUATION 2018

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Whilst stocks last.

Your Union Events

Friday 12 October



FiveSixEight.



COMMON PEOPLE

Friday 12 October | 20:00 - 02:00

Come enjoy a mix of Indie, Rock and Brit Pop floor fillers.
£1.50 on facebook guest list; £2.50 on the door

imperialcollegeunion.org



13 October, Saturday

Open Mic Night
Union Bar | 19:00 - 22:00

16 October, Tuesday

Super Quiz
FiveSixEight | 19:30

Jazz & Cocktails
Metric | 19:00 - 23:00

The Quiz
Reynolds | 18:00 - 20:00

17 October, Wednesday

CSP Wednesday
Beit Bars | 19:00 - 01:00

18 October, Thursday

Pub Quiz
h-bar | 19:30 - 21:30

19 October, Friday

PGI Friday
h-bar | 19:00 - 23:00

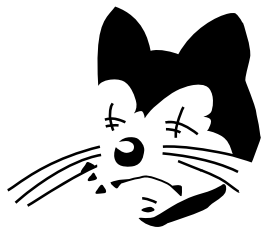
Replay Friday
Reynolds | 19:00 - 23:00

For tickets and event details, go to



imperialcollegeunion.org/whats-on





Hangman



Kinky Cuffs // Reuters

50 Shades Freed - Attack of the Philandering Felon

HANGMAN

Negafelix
Editor-in-Chief

Union volunteers have fallen victim to targeted 'catfishing' attempts from foreign prisoners looking for new income streams.

An undercover investigation by Negafelix has revealed an alarming number of ICU volunteers falling prey to requests for cash and companionship from incarcerated individuals.

Negafelix has intercepted a letter addressed to the Science Fiction

Society from one Mr Cedric Desmond, of 2750 Jailbird Boulevard, NV 81637, requesting financial support through online purchase of his collection of soft-core erotica, as well as his online writing masterclasses.

Connected to the letter was a link to his personal InmatesPersonified page, where he is self-described as "six foot 3 inches (tall), [with a] muscular build" and "looking for love."

Further detective work - involving Google - revealed that Mr Desmond was, in fact, 5'3" with a "large build" and imprisoned since 2000 on an array of charges including - but not limited to - battery, kidnap and aggravated assault with a

sex toy.

Emile de Boullion, part-time Student Receptionist at the Union Reception, expressed dismay at the findings.

"He told me he loved me," she exclaimed in despair. "He said that his work was an expression of his passion for me. I feel betrayed and used, like an old dishrag. How could I fall for a man not even tall enough to catch me?"

Another student, who wishes to remain anonymous, claimed, "He used to send me love poetry. I felt so special. Then my friend [CheeseSoc President] also got the same letters. We both found out he'd been pulling excerpts from his e-book of BDSM erotica on Amazon. I was

livid."

Binky Steel, Deputy President, Welfare, said of the situation, "I can't believe I didn't get a single letter. Quite frankly, I'm offended - don't they

"I can't believe I didn't get a single letter... don't they know who I am?"

know who I am? No one gives two shits about CheeseSoc or those Sci Fi nerds, so why do they get all the fun? All I get is people crying at my

desk about how they're oppressed by the system. I might want some steamy love notes too!"

Mr Desmond, speaking from Nevada State Penitentiary, defended his choice of targets. "Look, I've been locked up for 18 years and even I know how tragic your uni is. Y'all still read my letters and bought my books. I'm just trying to get me some extra cash - if that's a crime, then call me a criminal!"

The Union has stated that it plans to survey affected individuals, the data from will be used to make colourful charts for display.

In somewhat related news, the Union Advice Centre has reported a

"For God's sake, heartbreak doesn't count as mitigating circumstances"

surge in the number of students looking for support with dejection. "For God's sake," says Beatrice Argave, "heartbreak doesn't count as mitigating circumstances. We've had 3 students ask for help this term; that's more than we had the whole of last year! How do people know where we are? Take your bullshit to counselling."

HANGMAN

negafelix@imperial.ac.uk

Felix just can't sort its Crossword Puzzle Out

HANGMAN

Negafelix
Editor-in-Chief

Negafelix apologises on behalf of Felix for once again screwing up the Crossword Puzzle

For the second week in a row, students and staff at Imperial College London were rocked by the continued failure of *Felix* to print a correct Crossword Puzzle.

Negafelix would like to take this opportunity to apologise on behalf of *Felix* for the flawed Crossword Puzzle and for also being a bit of a dick last week. On discovery of the erroneous Crossword Puzzle, *Felix*'s initial reaction was: "bruh...".

This time around, the error was not as severe as that of the infamous incorrect Crossword Puzzle of *Felix* Issue 1698, the first issue of *Felix* for this academic year (pictured). In that issue, the Crossword was simply unsolvable, as the clues did not correspond to the grid. This time around, one of the clues was omitted. For those of you deeply

"There's always next week's issue..."

affected by this, the clue for 13 Down was "haste, carelessness".

With this being the second consecutive week that the Crossword has been flawed, it is safe to say that *Felix*, and the wider Imperial College community in general, has entered a state of crisis. It seems that the ire of those that initially contacted *Felix* to complain was, in fact, completely



The Infamous Incorrect Crossword of *Felix* Issue 1698 // Anonymous Moaner

justified and *Negafelix* can do nothing but offer unreserved apologies for the fuck up. However, it

is important to remember that the paper is printed weekly and there's always next week's issue. We

promise not to screw up again.



ARIES

This week, you decide to try out the Union's breakfast offerings.

Starvation isn't so bad, is it? (lol jk the food's actually not that bad)



TAURUS

This week, you discover Ethos membership fees have gone up.

You take it as a sign to stay in bed and eat Sensations.



GEMINI

It's only 3 weeks in and yet this week you're already in over your head. Congrats, you have more issues than Felix.



CANCER

This week you find yourself in hot water. Quite literally so; someone tampered with the heating in the Ethos pool and you feel like a steamed crab (har har).



LEO

This week you lose your appeal in Union Court and get banned from attending lectures for 3 days. Not that you were planning on going anyway.



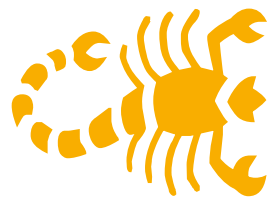
VIRGO

This week, you're Theresa May. For some unknown reason, you still have a job. Seriously; no one likes you and you're not even that good at what ever it is that you do. Yet still you cling on.*



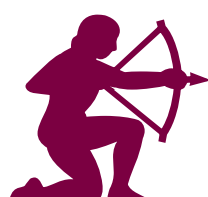
LIBRA

This week, you are the Union Student Activities Co-ordinator. People are rioting about the room booking delays, calling for your head. You do the wise thing and hide under your desk.



SCORPIO

This week, you fall in love. At least you think it's love. Your heart's squeezing in longing and you feel so lightheaded you could fly.. Actually, this sounds a bit like a heart attack.*



SAGITTARIUS

This week you've realised it's time to come out to the world. There's no point hiding it anymore. You too identify as Ethics & Environment.



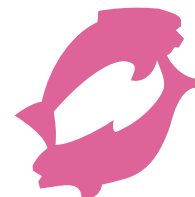
CAPRICORN

This week you decide to run for Representative to Council. Bless your heart; you have no idea what you've signed up for, do you?



AQUARIUS

This week, you remember people saying that every flat at uni has one prick no-one likes, but your flatmates are cool. When you walk into the kitchen, everyone stops talking and looks away.*



PISCES

This week you decide to read through your society's SPAM digest for fun. What the hell were the previous committee signing up for??

INVESTMENT

icu.investmentsociety@imperial.ac.uk


A Country's Piggy Bank

INVESTMENT

Xerxes Chong Xian

Investment Editor

We've all heard the age-old advice; save up for a rainy day, spend a little less, invest that money and have enough to retire. Your favourite car, that house in the countryside, that trip to the Maldives you've been planning since the days of eating lunch at your desk. The message is clear, invest for the future. As we meticulously allocate funds to reap returns, so do countries through sovereign wealth funds (SWF).

SWFs are the investment funds of countries, which invest for the long-term benefit of its economy and its citizens. Funds are derived from accumulated trade and budget surpluses and from the exportation of natural resources. Sources are split between commodity-based and non-commodity-based sources. Oil and gas forms more than 50% of global SWF funding. Some countries even have multiple funds to meet specific investment goals of its government. According to SWF Institute, the 10 largest SWFs in the world at time of writing consist mainly of Middle Eastern and Asian funds, except for Norway's Government Pension Fund. It holds the title of the largest SWF in the world, having more than \$1 trillion of assets under management.

The Linburg-Maduell Transparency Index measures the transparency of a fund's operations on metrics such as how transparent it is about holdings, government ownership structure, investment process and objective. Funds are ranked from 1 to 10,

from the non-transparent or "opaque" to the most transparent.

SWFs are split into 4 broad categories; savings, macro-stabilisation, pension reserve and strategic funds. They differ in their investment objectives and methodologies, such as having a short or long-term investment horizon, and projected liquidity requirements (indicating the frequency of future withdrawals from the fund). Each fund is split across 4 asset classes; cash, equities, fixed-income (bonds) and alternative investments such as private equity, hedge funds and real estate. In general, funds with longer investment horizons will be heavily weighted in equities as the longer time frame would ride out short-term market volatility and allow investments to bear fruit. Alternative assets tend to be found on funds with longer horizons, requiring longer planning and execution to exit profitably. Shorter investment horizons necessitate a larger proportion of liquid assets to meet large and often unexpected capital outflows due to higher liquidity requirements. Most SWFs are savings and macro-stabilisation funds.

Savings funds preserve and grow a country's wealth for the future and have investment horizons that span decades. Countries rich in lucrative but inevitably finite natural resources such as oil, gas, precious metals and other commodities, channel revenue from sales into savings funds. This ensures future generations can reap the benefits of a depleted or stranded resource. SWFs such as the Kuwait Investment Authority and Saudi Arabia Public

Investment Fund were set up to meet the future of depleted oil wells, stricter environmental regulations, and the proliferation of cheaper green-energy alternatives that renders hydrocarbon extraction uneconomic.

Macro-stabilisation funds are designed to mitigate the effects of the resource curse, an economic phenomenon in resource-rich countries that results in high government spending with soaring commodity prices, followed by austerity during downturns. Money is drawn down from these funds to make up for the loss of revenue, injecting liquidity and smoothing out the peaks and troughs of government spending. The funds are also used to help stabilise the value of a country's currency during macroeconomic shocks. For these reasons, investment horizons are short and involve mainly liquid assets.

Pensive reserve funds invest to build capital for their government's future pension obligations. An example would be Singapore's GIC, which manages funds from Singapore's Central Provident Fund, a compulsory savings plan for working Singaporeans to fund their retirement, healthcare, and housing needs. Returns between 1% and 5% are guaranteed by the government. GIC manages a fixed pool of the country's savings and foreign reserves to generate good long-term returns that beat global inflation.

Strategic funds can form part of a country's domestic economic policies, investing in strategic industries to nurture their development, promoting growth in the domestic and international economy as well as providing generous returns. They provide key



Countries save and invest, just like people // Thinkstock

early funding to small and medium enterprises and may take longer-term stakes to facilitate the growth in later stages of the business cycle. Some are even pro-active managers, assisting in restructuring and funding of distressed companies. Whilst such funds tend to have a domestic focus, some have reaped returns and dividends to venture into overseas markets. Singapore's Temasek initially managed various state-owned-enterprises but eventually transitioned into a more globally orientated portfolio with stakes in Alibaba and Standard Chartered, while retaining a sizable domestic portfolio. In January 2018, Temasek joined Google in investing in Indonesian ride-hailing firm Go-Jek, which is preparing to launch in Singapore in October 2018 to compete with

Malaysian rival Grab.

Apart from Norway and Singapore, several large SWFs have been facing scrutiny, particularly funds from the Middle East, scoring an average of 5 on the transparency index. The lack of transparency in these funds' sizes and objectives, coupled with close links to their governments, have led to speculations of politically motivated investments. SWFs can clandestinely acquire strategic assets of another country, stealing proprietary information, patented technology and trade secrets. The bailout of major U.S financial firms during the global financial crises of 2007-2008 by Asian and Middle Eastern SWFs and the subsequent poor performance from these investments increased debate on investment strategies and put pressure on managers to avoid

"It holds the title of the largest SWF in the world, having more than \$1 trillion of assets under management"

further losses.

These funds are institutional investors with large sums of capital ready to be injected. The range of companies they invest in adds to the available pool of capital accessible across the life cycle of businesses. Savings and pension funds invest current earnings for future generations, allowing individuals and countries to continue participating in the domestic and international economy for years to come. In times of need, SWFs have aided distressed companies, both domestic and international. Despite criticism, SWFs have their place in the international capital market.

Spike your Interest?

Write for us!

Send your article.

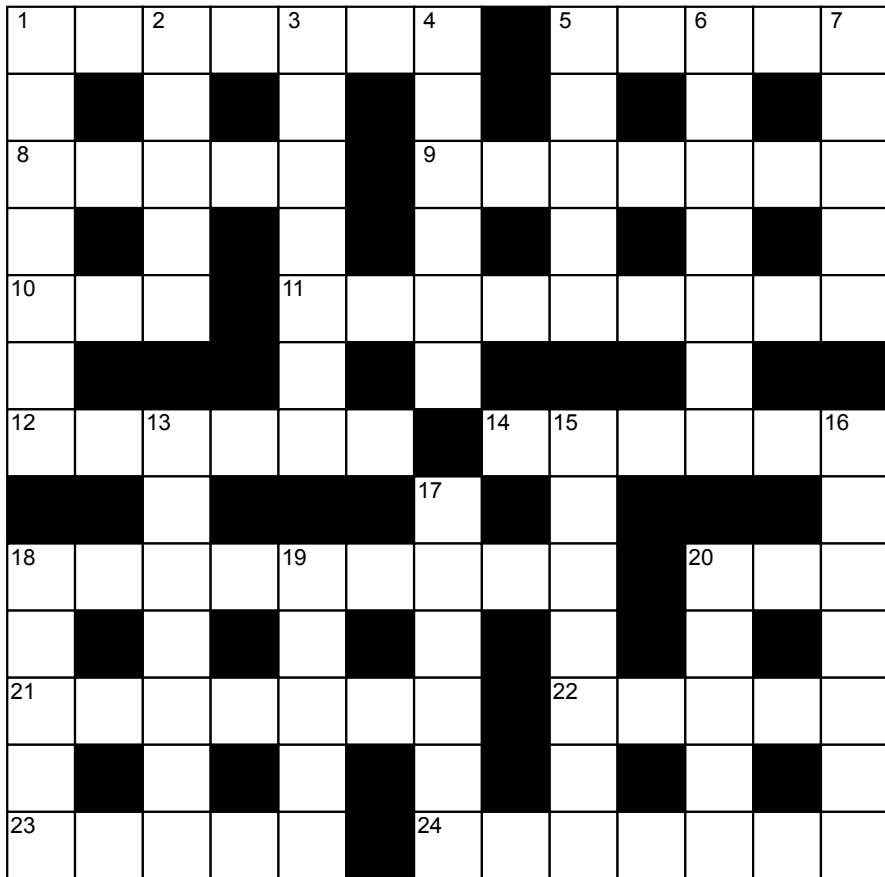
Get it published.

Panel A: Investments in Publicly Listed Firms					
Date	Target	Target's Business	Target Exchange	Acquirer	Origin
25-Jul-07	Fortress Inv. Group LLC	Asset Management	NYSE	Qatar Investment Authority	Qatar
22-Aug-07	MGM Mirage	Resorts & Casinos	NYSE	Dubai World	UAE
20-Sep-07	Nasdaq Stock Market Inc.	Security & Commodity Exch	Nasdaq	Borse Dubai	UAE
23-Oct-07	Bear Stearns Cos. Inc.	Security Brokers & Dealers	NYSE	CITIC Securities Co. Ltd	China
16-Nov-07	Advanced Micro Devices Inc.	Semiconductors	NYSE	Mubadala Development Co.	UAE
26-Nov-07	Citigroup Inc.	Money Center Banks	NYSE	Abu Dhabi Inv. Authority	UAE
19-Dec-07	Morgan Stanley	Security Brokers & Dealers	NYSE	China Investment Corp.	China
24-Dec-07	Merrill Lynch & Co. Inc.	Security Brokers & Dealers	NYSE	Temasek Holdings (Pte) Ltd	Singapore
15-Jan-08	Merrill Lynch & Co. Inc.	Security Brokers & Dealers	NYSE	Kuwait Investment Authority	Kuwait
15-Jan-08	Merrill Lynch & Co. Inc.	Security Brokers & Dealers	NYSE	Korea Investment Corporation	South Korea
15-Jan-08	Citigroup Inc.	Money Center Banks	NYSE	Kuwait Investment Authority	Kuwait
15-Jan-08	Citigroup Inc.	Money Center Banks	NYSE	Government Inv. Corp.	Singapore

Investments by SWFs in the financial crisis // Thunderbird International Business Review

PUZZLES

fsudoku@imperial.ac.uk



CROSSWORD

Across

1. Spectacles (7)
5. Foot gloves (5)
8. A very focused beam of light (5)
9. Show, expose (7)
10. Possess (3)
11. Compliance, respect (9)
12. At an angle (6)
14. The 11th finally made the landing (6)
18. Finds it hard to sleep (9)
20. Welcoming door rug (3)
21. Tall monument (7)
22. Sweet, almost sickly, treat (5)
23. Extract metal from its ore (5)
24. Base ten (7)

Down

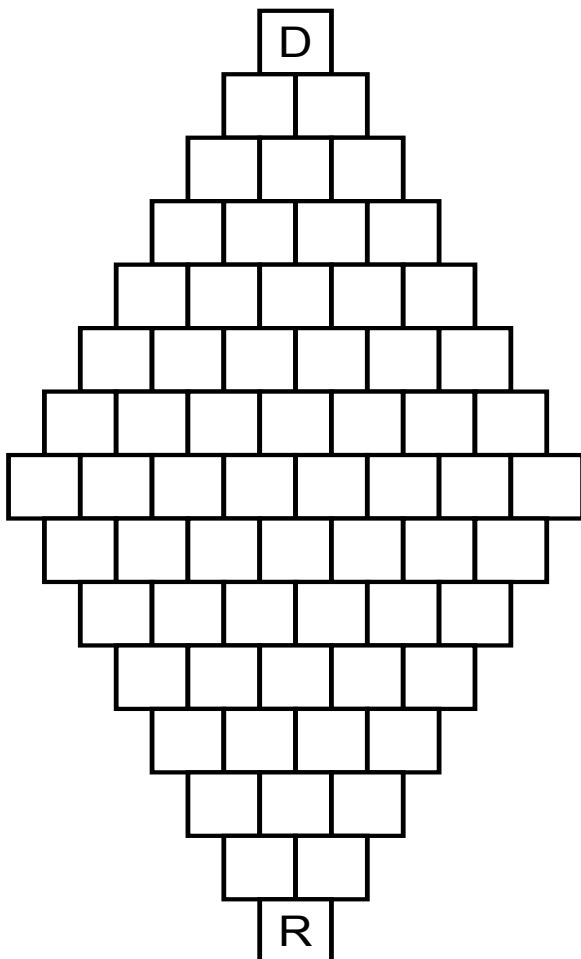
1. Where people get hanged (7)
2. Criminal fire-starting (5)
3. This Dickens character had some trouble with verb tenses (7)
4. Largest city in Oceania (6)
5. Japanese rice delicacy (5)
6. A high-ranking officer (7)
7. Classy things never go out of it (5)
13. Offensive and immoral (7)
15. Between America and Asia (7)
16. Common breakfast food (7)
17. Sick! (6)
18. Lots of these on your desktop (5)
19. Slightly damp (5)
20. Mrs (5)

WORD PYRAMID

Each row is an anagram of the previous, plus or minus one letter.

Clues, from top to bottom:

The note before Re (2) – A long stick (3) – Street (4) – The predecessor of TVs and iPods (5) – Greek modal musical scale (6) – Better than iOS (7) – Confirmed priest (8) – Emptied of water (7) – Foraged (6) – Broadcasted (5) – Desperate... straits (4) – Freed from (3) – Infrared (2)



FUCWIT

Send a picture of your solutions to fsudoku@imperial.ac.uk before Wednesday midday to take part in the leaderboard!

Points Available

Crossword	5
Word Pyramid	4
Sudoku	2
Minesweeper	4
TOTAL	15

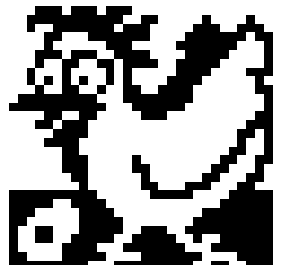
Leaderboard

Luncheon Pals	18
Maxiane	18
Sudoku-urself	14
Ed, Edd & Eddie	13
Cat Ladies	13
Wilson Kitchen 76	9
CHZYNo.1InMy<3	7

Last week's solutions



9	3	2	5	8	6	4	1	7
5	7	4	2	3	1	8	9	6
8	1	6	4	9	7	3	2	5
7	8	5	9	4	3	1	6	2
4	2	9	6	1	5	7	8	3
3	6	1	7	2	8	5	4	9
6	4	3	8	7	9	2	5	1
2	5	7	1	6	4	9	3	8
1	9	8	3	5	2	6	7	4



	3	7			2			8
	2		3		8			
8		5			4			
			6	1				
5								7
				4	3			
			4			6		2
			9		7		4	
3			2			1	5	

SUDOKU

Fill all the boxes with a number between 1 and 9. A number can only appear once in a row/column, and only once in each 3-by-3 square.

	1		1	2		1	1	
				2				1
1		1		1				
				1		1		1
1					1			2
	1	1						
					1	2		1
	2	2	1		1		1	
	2		2		2			1
		1						1

MINESWEEPER

The number in a cell represents the number of mines adjacent to that square (up/down, left/right, diagonal). Find and mark all of the mines to clear the board.

SPORTS

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UEFA Nations League: explained

With the second international break upon us, it's time to find out what's actually going on...

SPORTS

Fergus Johnson

Sports Editor

This week the Premier League takes a break and the second round of fixtures in the all-new UEFA Nations League are taking place, but what even is the Nations League?

News stories circulated back before the first fixture that England gaffer Gareth Southgate had tried to explain the new competition format to the team but the complexity went over the head of the likes of star defender Harry Maguire.

“Due to winter venue restrictions, a group in League C could contain a maximum of two of these teams: Norway, Finland, Estonia, and Lithuania”

The competition sees the 55 UEFA national teams divided into 4 divisions (the “leagues”), based on their UEFA National Team Coefficient Rankings (England are currently ranked 7th). Due to the awkward number of teams under the UEFA umbrella, there are 12 teams in Leagues A & B,

15 in League C, and 16 in League D.

Within each league there are 4 groups, with 3 or 4 teams in each group. Each team plays every other team in their group both home and away with each league ending with 4 group-winners and 4 group-losers.

The groups were selected by drawing teams from pools based on the order of the team's UEFA coefficients (e.g. for League A there were 3 pools of 4 teams with teams ranked 1-4 in Pool A, those ranked 5-8 in Pool B, and the 9-12 ranked sides in Pool C).

It is also worth noting that due to winter venue restrictions, a group in League C could contain a maximum of two of these teams: Norway, Finland, Estonia, and Lithuania. Similarly, due to excessive travel restrictions, no group in League D could contain more than one of these pairs: Andorra & Kazakhstan, Faroe Islands & Kazakhstan, Gibraltar & Kazakhstan, Gibraltar & Azerbaijan.

There are 6 matchdays for the Nations League, but as they have fewer teams, those in Leagues A & B will only play on 4 of these. This is why in mid-September England took on Spain and Switzerland in quick-succession, losing to Spain 2-1 in their first game of the Nations League whilst beating the Swiss 1-0 in a friendly rather than playing their second Nations League match.

After all the games have been played, each group-winner (excluding those in League A) is automatically promoted to the league above them, and each group-loser (excluding those in League D) is relegated to the

league below them for the next tournament.

Additionally, the four group-winners of League A will qualify for the Nations League finals next June. This will be played in a knockout format with the two semi-final pairings selected from an open draw and the first-round matches followed by a third-place place-off and a grand final to crown the first winners of the UEFA Nations League.

“The tournament is played over the months of September-November in even-numbered years, with the finals being held in June of the following odd-numbered year”

The finals will be hosted by a randomly selected bidding nation from this final quartet. UEFA announced in March that Italy, Poland, and Portugal had expressed an interest in bidding before the August deadline, so as all three of these teams are in the same group (3) in League A it is likely that the winner of Group 3 will host the finals provided their bids fulfilled the criteria outlined by UEFA. This includes the preference for the finals to be played in two stadiums



The 2020 UEFA leagues and groups. // UEFA NATIONS LEAGUE

with a capacity of at least 30,000 and located in the same host city, or at least within 150km of each other.

The tournament is played over the months of September-November in even-numbered years, with the finals being held in June of the following odd-numbered year.

So how does this fit into qualifying for the 2020 Euros?

Well, European qualifying will go ahead as normal during March-November 2019 with the winner and runner-up of 10 groups qualifying for the Euros, filling 20 of the available 24 places in the final tournament. The Nations League is used to fill the final 4 places, with the play-offs taking place in March 2020.

The 4 highest-ranked teams in each league of the Nations League that

do not qualify via the official qualifying will be

“The rankings are based on position in the group then points, goal difference, goals scored, away goals scored, wins, away wins, disciplinary points, and finally coefficient ranking”

put into 4 separate knockouts with the winner of each 2 game knockout securing one of the final 4 places at the Euros. In the case that there are fewer than 4 teams in a league that do not qualify for the Euros, the highest-ranked remaining team will be entered into that knockout.

The highest-ranked team in each of the semi-finals will host the match, with the host of the final for each of the 4 play-offs determined by a draw.

The rankings are based on position in the group then points, goal difference, goals scored, away goals scored, wins, away wins, disciplinary points, and finally coefficient ranking.

Does that all make sense? Good.

Time to get revenge against Croatia...

SPORTS

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F1 season review: post Japanese Grand Prix

Politics editor Divyen Vanniasegaram weighs in on the affairs of the 2018 F1 Championship.



Throwback to Sebastian Vettel winning the 2009 Japanese GP with RedBull // Wikimedia

SPORTS

Divyan Vanniasegaram
Politics Editor

Following the Japanese Grand Prix Vettel's chances of winning the 2018 F1 Championship have diminished to barely more than a dream. Following a season in which both Hamilton and Vettel have been closely matched throughout this is a bitter pill to swallow for Ferrari.

Following the first 10 races where a maximum of 250 points were on offer only 8 points separated the drivers with Vettel barely ahead. This was indicative of an enthralling contest where the title battle swung one way then the next with plenty of surprise results along the way. This had been by far the most interesting Championship battle for nearly a decade with both drivers aiming for their 5th world title. However, Hamilton has

outscored Vettel by 75 points in the last 7 races and turned an 8-point deficit into a massive 67-point advantage with only 4 races remaining. He can now wrap up the Championship at the next Grand Prix in the USA. This would have been unthinkable even a couple of months ago. So how have we got to this point?

Ferrari and Vettel have simply made too many errors in a contest of this nature with the margins so fine. It has been a decade since Ferrari last won a Championship battle whilst Mercedes have won every title since 2014. Mercedes has become a well-oiled winning machine, demonstrated by their use of team orders in Russia to ask Bottas, Hamilton's teammate, to move over so that Hamilton could win the race and further extend his lead over Vettel. Vettel himself has made significant errors throughout the Championship including at the German Grand Prix where he spun off out of the race whilst leading, in

Italy where he defended his position too hard and was sent into a spin ending up at the back of the field and in Japan where he tried to dive down the inside Verstappen which yet again saw him spun around and at the back of the field. In total his errors have probably cost him conservatively 70 points in points directly lost and points gained by Hamilton as a direct result of his errors. Given this he should be ahead in standings.

Vettel is a 4-time world champion who is used to the pressure. He won his first championship having been only 3rd coming into the final race of the season and had to fight off Alonso, considered one of the greatest drivers of the modern era, in a tight battle to win his 3rd championship as well. This is in no small part down to his relationship with Ferrari. Driving for Ferrari itself brings on more pressure given the prestige and the expectation. On top of this Vettel doesn't seem to have

faith in Ferrari to execute effectively to give him the best chance to win. He has often called into question Ferrari's strategy from the car and attempted

“Hamilton has outscored Vettel by 75 points in the last 7 races and turned an 8-point deficit into a massive 67-point advantage with only 4 races remaining”

to dictate strategy calls from the cockpit. These distractions can't help a driver achieve their potential within the car and these doubts are not

without merit. Ferrari have also made a series of operational errors which have cost Vettel. Most notably in Italy where Vettel's teammate ended up on pole position when Ferrari could easily have manufactured a situation to put Vettel on pole and in Japan where Ferrari sent Vettel out on the wrong tyres designed for wet conditions when the track was dry enough to use slick tyres. Whilst a borderline decision the rest of the field managed to get it right, so the question is why didn't Ferrari. Hamilton has made errors as well, particularly by not extracting most out of the car in the early part of the season. Mercedes have been guilty of slipping up such as in Austria where Hamilton initially lost the lead due to a team error and then ultimately retired from the race with a mechanical problem with his car. However, these errors have been few and far between and significantly there is a great synergy in the team, with the team and Hamilton working

effectively together to bridge their respective flaws, such as in Russia where Hamilton was able to overtake Vettel following a team error which allowed Vettel to get in front. It is clear that Hamilton trusts his team 100% to make the right calls and he therefore only has to focus on driving as fast as he can.

Hamilton has all but sealed the title for this year, but it has been a fantastic year in Formula 1. It is encouraging to see 2 teams slugging it out having seen Mercedes dominate since 2014. Ferrari will rue what could have been considering they've had a car fast enough to win the championship this year and will need to build on the success they've had this year. With the cars being redesigned next year to aid overtaking and hopefully Ferrari pushing Mercedes even closer for the title, the 2019 season looks set to be a cracker.

SPORTS

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Ultimate frisbee fly out to Italy for an international beach tournament

SPORTS

May Kyaw

Ultimate dD Club Captain

Imperial College Ultimate's Disc Doctors recently participated in an international beach tournament, BURLA, from September 20th to September 23rd in Viareggio, Italy. The aim of attending BURLA was to allow our university team to participate in beach ultimate, which is not implemented during the university season. In addition, the tour hoped to develop the social and fun part of our ultimate community. Both of these goals were achieved as the team members who participated got to play three days of beach ultimate as well as spend time with team members off the pitch at the beach venue, Flora Beach. Whilst the team could not muster as many players as we wished, there was a decent sized team for beach of 8 full club members. Beach ultimate is played 5-aside.

All tour money was used to subsidize air travel or train tickets to the venue.

A day by day breakdown of the tour is listed below:

Thursday 20th

Team members checked in together at Campsite Paradiso in Viareggio, Italy, completed the final registration for BURLA, and rented bikes to travel to and from the campsite. The team enjoyed dinner together at the campsite and briefly attended the tournament's Welcome Party before retiring to the bungalows booked.

Friday 21st

The team had breakfast together at the campsite before biking to the tournament venue at the beach. The captains attended the captains meeting at the beach at around 10:00 am, after which the team played three matches. Between matches, the team either kept score of other games they were told to score or rested at the venue. The team's first game was at 10:00 am against another university team called Bear Foot. The next game



disc Doctors' Sunset Team Photo at BURLA 2018 // Imperial Ultimate

was held at 12:00 noon against the team Admiral Ackbear. Both teams were sent by Warwick University. Lunch and refreshments were taken on the beach at the Dori bar using the lunch tickets provided. The last game was played against the Trojan Unicorns (a team

who ultimately won the entire tournament) at 17:00 pm. After the game the team enjoyed SUNSET SPRITZ aperitif on the beach whilst keeping score of a game between Admiral Ackbear and Trojan Unicorns. After this the team cycled back to the campsite to eat

dinner and recover from 3 defeats.

Saturday 22nd

The team enjoyed a lie in as their first game was not until 12:00 noon against the German Grand Masters Team. Unsurprisingly, it was another defeat, but the team was extremely happy to have developed improving flow throughout the game and have slowed an experienced national team down. This game showed that the team was starting to get the hang of playing on sand. At 14:00 pm the team played another game against Quattro Stazioni. After the games the team again enjoyed lunch at Dori bar using the lunch tickets provided. The team then enjoyed swimming and practicing throwing on the beach. At 18:00 pm the tournament hosted a BANZAI beer race which the entire team participated in. The team then enjoyed dinner together at a nearby restaurant and then cycled back to the

campsite to get ready for a tournament hosted themed party, which also included a live music from a band called euroTUNZ and a DJ at Flora Beach. The party was hosted from 9:30 pm to 2:30 am and included shuttle service to and from the campsite and the party location. It was a very mediocre party.

Sunday 23rd

The final day was a brutally early start with a game against Sharkbear at 9:30 am. At 12:30 pm the team ended with a super close game against the team Who Bear Wins, which ended on universe point, to the disc Doctors! This win ensured the team did not end up last. The team then enjoyed lunch and drinks at the Dori bar with the lunch tickets provided and then watched the final games and the award ceremony before returning to the campsite to rest and pack up.



Registration Night Team Dinner at BURLA 2018 // Imperial Ultimate