

**Felix** Welcome back!  
We're sure you missed us as much  
as we missed you

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ISSUE 1798

FRIDAY 29TH APRIL 2022

# Imperial PhD candidate arrested for climate protest outside BEIS offices



Credit: Andrea Domeniconi

**Sam Lovatt** Editor-in-Chief

An Imperial College PhD candidate was arrested for causing criminal damage after involvement in sticking posters to, and spray-painting, the offices of the department of Business, Energy and Industrial Strategy.

The incident, which occurred on April 13th, involved 25 members of the Scientists of Extinction Rebellion group, a subset of Extinction Rebellion (XR).

The PhD candidate, Peter Knapp, was arrested along with eight other protesters involved in actions involving contact with the department's building. Eight protesters, not including Peter, glued themselves to the office building. 16 other attendees held banners and spoke to passers by, but were not arrested.

According to himself, Peter was held at Barking Police Station for 22 hours before being released on bail.

He had used chalk spray to spray paint the building. Chalk spray is a non-permanent material that is easy to remove from a flat surface, but may be mistaken for standard spray paint.

"I felt I had to do this to stand up to the integrity of science. The government is ignoring the science and providing new oil and gas licenses. The UN Secretary General said just weeks ago that governments who continue to increase production of fossil fuels are dangerous radicals, rather than climate activists like me and my fellow protesters."

Peter gave his thoughts on the actions of the police when I spoke to him about the incident.

"One of the bail conditions was that I had to stay out of the City of Westminster, which, if you didn't know, includes Imperial's South Kensington campus. At the time I complained, saying 'I work there!'. They gave some sort of technical answer where I can commute through Westminster but can't disembark there but didn't really clarify things, so I'm currently in the situation where I can't technically be in the lab without breaching my bail conditions".

Peter's court hearing is on the 12<sup>th</sup> May, and until then he finds himself in limbo. He says he will plead not guilty to the charge of criminal damage, and compared his situation with that of a group of six activists who last year were found not guilty of vandalising the HQ of Shell.

Peter's climate anxiety began around

three years ago. Following a degree in maths he trained to be a teacher and taught maths in Beijing and Switzerland. In Beijing the effect he could see the air pollution was having on kids made him realise the immediate human effects of burning fossil fuels, and after working at CERN for a year he began his current PhD in air quality.

Reading Jonathon Porritt's book *Hope in Hell* further strengthened Peter's resolve to take action over the climate crisis. The vision of the future that Peter could see was so bleak that, for a time, he found himself depressed and felt isolated from many of his friends and family.

"Finding XR changed things around for me. I no longer felt that I

*...continued on page 3*

# EDITORIAL

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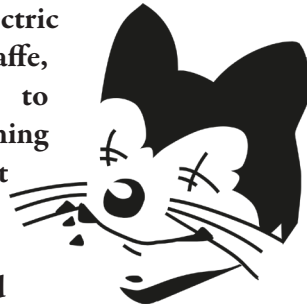
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## Non-doms

Since Felix last graced your eyeballs, Rishi Sunak has taken quite the tumble by anyone's standards. First came the botched publicity stunt, where he was photographed filling up a normal-looking Kia at a petrol station, only for it later to emerge that he'd paid an employee of said station 30 quid to borrow the car to make him look more down to earth, and that the car was electric anyway. In the same gaffe, he was papped trying to pay for his fuel by scanning his credit card against the barcode scanner, suggesting, I don't know, that he'd never paid for anything by card before?



Then there was the bombshell that his extraordinarily wealthy wife, Akshata Murthy, despite having lived in the UK since 2013, was registered under 'non-domicile' tax status, meaning that she does not pay tax in the UK on foreign income. Her wealth is largely comprised of her 0.91% stake in the company her father co-founded, Infosys, which puts her net wealth at almost £700 million. Whilst this is legal, it certainly doesn't look good for the immediate family of the man in charge of all our taxes, and the public outcry reflected this.

Thirdly, there was the quite shocking revelation that Sunak was served a fixed penalty notice, along with Boris, for breaching lockdown regulations by attending at least one of the many parties at Downing Street.

Whilst I would say that these three instances increase in severity from first to last, in terms of making the Chancellor's position untenable, there seems to be a lot more sinister about the tax status incident than immediately meets the eye.

Firstly, it is not simply a matter of principal, as the lockdown breaches essentially are. Given the regular tens of thousands of cases a day, and all the other illegal mixing that went on, the chances of the Number 10 parties actually contributing noticeably to the spread of covid are vanishingly small (not that this takes away from how terrible the behaviour is, and nor should it). Murthy's wealth, however, is a different matter. *The Guardian* and

*BBC* have both estimated that Murthy has avoided around £20 million in UK tax since living here, through her non-dom status, however this is small change compared to the savings on inheritance tax. *The Times* estimates that the benefactors of Murthy's will shall save just over £400 million in inheritance tax when she passes, due to some obscure clause of the 1956 UK-India treaty, and the fact that India simply does not have inheritance tax. £400 million is an incomprehensibly large amount of money. A tax reaping of that size would make up around 4% of the total expected to be raised

by the recent National Insurance hike in the next year. Or around 8% of the cost that maintaining the £20 uplift to Universal Credit would incur. And this is just from one woman. The kicker here is that she will \*still\* not pay this, as the aforementioned treaty means she will be exempt from inheritance tax indefinitely, even when her non-dom status is rescinded.

What's worse is that they lied about it. The initial response from Murthy and Sunak was that she didn't pay tax because she is an Indian national. This, obviously, was debunked almost immediately by experts who explained that Murthy would have had to intentionally "tick a box" on a form when registering her tax status. It was later revealed that she even pays £30,000 a year to retain her non-dom status.

Furthermore, Sunak has launched an inquiry to find out who leaked the details of his wife's tax status, spending public money to do so and suggesting he still thinks that the public shouldn't know? He said that his wife had not "done anything wrong", seemingly making the mistake of assuming that because something is legal it is morally right.

One thing Rishi can do now to save some skin (and maybe some chance at a future bid for PM) is to work to abolish this ridiculous loophole. There are 238,000 'non-dom's in the UK, and given the £30,000 price tag for retaining the status after seven years in the UK, it's worrying to think how much tax is being lost.

## Statement of Intent

At Felix we believe that it is always in the interest of the students to know. Transparency in the workings of the College and the work of your student representatives is key. Therefore I, the Felix Editor, on behalf of the team promise that:

We will, to the best of our ability, tell you the whole truth and nothing but the truth.

We will keep your confidence and will only publish something you say to us if you have explicitly said that we can.

We will work to expose unfairness and discrimination in all forms that it takes at the College.

We will treat fairly any article sent to us, regardless of point of view, and do our best to work with you to prepare it for publication.

Signed by Sam Lovatt  
Editor-in-Chief

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...continued from page 1

was alone and became part of a new community, with a much stronger sense of purpose and identity”.

Peter thinks that there is hope for reducing the intensity of many of the effects of climate change, but that “there’s going to be a lot of pain along the way”. He blames the government for sticking their heads in the sand and ignoring climate data, and says that they are totally reactive rather than proactive.

“The fact that further oil exploration currently surpasses robust on-shore wind infrastructure as a priority beggars belief.

“The government are happy with the currently wasted energy and are tying themselves in knots trying to get more, and I think that’s the wrong

way to go about things. We need to improve home insulation, public transport and stop subsidising things like flights so we actually need less energy in the first place, rather than considering further explorations for oil and gas in the North Sea”.

Peter also advocates a vegan diet, citing the wasted money subsidising meat and dairy and that the same nutrition can be acquired through plant foods which take a fraction of the land and resources to produce. He sees this as a change that needs to be made by both individuals and the government, where individuals need to make the choice but the government need to put a lot more effort into giving people the right information in order to make an educated decision.

## Meal prices at College venues rocket

**Sam Lovatt** Editor-in-Chief

The price of food bought on College campus has been substantially increased, following general increases to the cost of living.

Food sold from College outlets is discounted for students, and less so for members of staff. The price of a main meal for a student has increased from £4.71 to £5.18, or by 47p. This represents a 10% increase.

Inflation in the UK is currently at 6.2% and is expected to rise to 8% or higher by the end of this year. This comes as a result of the war in Ukraine pushing up food prices, delayed effects of the pandemic on the global economy, and Brexit.

“Value for money” purchases such as meal deals have remained the same price as they were before the increase.

A College spokesperson said “Since November 2021, the catering industry has faced an exceptionally difficult economic environment. Food costs have increased by up to 17 per cent in a matter of months and, in

the face of labour shortages, above-inflation wage increases have been implemented to attract and retain staff.

“The College’s Catering team absorbed these increased costs for as long as possible but, as a not-for-profit enterprise, it was a financial necessity to introduce an across-the-board tariff increase of 10 per cent on the 22<sup>nd</sup> March, with the same happening in Imperial College Union outlets from May. This increase does not fully cover the losses incurred, which will continue to be partially absorbed. This change was announced on notices and menus within outlets.

“We know finances are tight for everyone right now, and a price increase is always a last resort. To ensure low-cost options remain available, the College Meal Deal has been held at £3.50 across all campuses, the QTR and hBar will continue to offer a full meal, side and drink combo for £6.50 and, in the coming weeks, a low-cost option will also be made available in the new Asian cuisine outlet in the JCR.”

# Congratulations to the winners of the Leadership Election



*Hayley Wong - President*



*Niamh McAuley - DPFS*



*Nathalie Podder - DPW*



*Dylan Hughes - DPCS*



*Jason Zheng - DPE*



*Chris Oldfield - ICSMSU President*

## NEWS

# New medical school means more overseas students can attend London campuses



Design for a new campus in Carlisle which will house the new medical school

## Testing comes to an end

Imperial College has removed the requirement for students and staff to take a covid test before coming to campus, effective from April 1<sup>st</sup> (we don't think this was a prank).

The College's previous track and trace system, carried out via the COVID-19 Contact Tracing Hub, has subsided, and the testing facility will from now on operate at a reduced capacity of 100 PCR tests per day, Monday - Friday (excluding Wednesday) at the South Kensington campus and on Tuesdays at Hammersmith. Fit to Fly PCR tests are still available to those that need them.

**Sam Lovatt** Editor-in-Chief

Imperial College London and the University of Cumbria are to open a joint medical school in Carlisle.

The school will train graduate-level medics (no undergraduates) in Carlisle, aiming to take in its first 50 students in 2025, with a strong emphasis on bringing people with medical training to this area of the country and "transform healthcare in local communities".

According to the College website, the school aims to unite Imperial's world class medical training with Cumbria's "expertise in the education of nurses, midwives, and allied health professionals to improve the region's access to world-class clinical care"

On the new school, Health Secretary Sajid Javid said "This partnership between Imperial College London and University of Cumbria will help

level up opportunity and train more doctors in the North West". According to Javid, there are 1,500 more medical school places across the UK since 2017.

As well as the medical school, Imperial College and the University of Cumbria will also collaborate on several research projects local to the North of England.

Whilst places for international students in the UK are uncapped, medical school places are capped at 7.5% of the total number of medical students. International students pay significantly more in tuition fees than home students. This year each international medical student will pay £46,650 for the year.

Felix understands that the Carlisle medical school will be open to home, graduate students only, and that the extra allowance of international students studying medicine will be taken up at the London campuses.

### How is Imperial tackling race inequality?



Join Race Equality Charter Self-Assessment Team (REC SAT) Co-chairs Anique Varleigh, Head of Exams & Assessment, Business School; and Stephen Curry, Assistant Provost for EDI for a special Town Hall meeting for students to discuss the work of the REC SAT. This will include the details of work already under way to support Black, Asian and Minority Ethnic students and staff, and outlining our priorities to achieve a more equal and supportive culture in the long term.

**Tuesday 10 May 2022 (11:00-12:00) via Microsoft Teams.**

This is an opportunity to hear more about the REC, including the work underway as part of the 2021 Imperial Bronze award. Questions both ahead of the event and on the day are welcome.

**Register for the REC Town Hall Meeting by contacting Alex Dawes, REC Coordinator**

[alexandra.dawes@imperial.ac.uk](mailto:alexandra.dawes@imperial.ac.uk)

### University Challenge 2021/22 Results

Opponent	Score
St John's, Cambridge	Imperial 210 - 155 St Johns
Exeter	Imperial 205 - 70 Exeter
King's College London	Imperial 235 - 50 King's
Reading	Imperial 225 - 120 Reading
Emmanuel, Cambridge	Imperial 170 - 65 Emmanuel
Reading	Imperial 125 - 115 Reading

# Science Museum cancels talk as speakers withdraw over FFC sponsorship

Sam Lovatt Editor-in-Chief

The Science Museum has cancelled a talk just hours before it was set to take place, as speakers withdrew due to the Museum's continued acceptance of sponsorship from fossil fuel companies (FFCs).

The talk, scheduled to take place on the evening of Wednesday 27th, was cancelled the night before after Professor Celia Morgan announced her decision to withdraw from speaking at the event on Twitter.

The talk, titled 'The Doors of Perception: Exploring Psychedelic Therapy', was set to involve a panel discussion amongst a number of notable scientists in the fields of psychedelics and pharmacology. The website Culture Unstained reportedly understands that Dr Rosalind Watts also withdrew from speaking at the event.

The withdrawals follow a number of other boycotts and resignations surrounding the museum's

continued relationship with FFCs.

As reported previously in Felix, plastic pollution scientists Steve and Dee Allen announced in November that they did not want their work displayed in the Museum's collection due to its ties with Shell plc. Around the same time, an open letter with 60 signatories, many of whom are prominent scientists in the fields of energy and the environment, was published, announcing that they would not work with the Museum until it ended its relationships with FFCs.

Chris Rapley, Museum ex-director and current UCL professor, stepped down from his role on the Museum's advisory board last year over concerns regarding relationships with FFCs, despite publicly supporting such partnerships during his tenure as director.

Also previously reported in Felix were the resignations of mathematician Dr Hannah Fry, and Director of the Institute for Research in Schools Dr Jo Foster, both in response to the Museum's continued involvement with FFCs.



Credit: Cara Burke

# Imperial wins University Challenge

Sam Lovatt Editor-in-Chief

The Imperial College team have won University Challenge for

the fourth time in the show's history.

After beating St Johns College Cambridge, Exeter, King's and Reading, the Imperial team comfortably

Credit: Imperial College London



prevailed over Emmanuel College Cambridge in the semi-finals and faced the Reading team for a second time in the final, aired on BBC2 on April 4th.

The final was far more closely fought than the previous Imperial-Reading match up, but Imperial won out in the end, beating Reading 125 points to 115.

Imperial have previously won University Challenge on three other occasions, in 1996, 2001 and 2020. Their fourth win puts them next to Manchester and Magdalen College Oxford as the institutions in joint first place in terms of the number of times they have won the competition.

Team captain Michael Mays told Imperial College "It's been an amazing, once-in-a-lifetime experience to be on University Challenge. And to have won the competition this year is truly unbelievable".

Also in the team were Biochemistry

undergraduate Max Zeng, Science Communication masters student Fatima Sheriff and Chemistry undergraduate Gilbert Jackson.

Speaking to Felix in March, the team spoke of their balanced approach to becoming the best team, spreading their expertise across as many subjects as possible and trying to avoid overlapping specialities.

Drawing much attention online was "walking atlas" Max Zeng, who displayed a seemingly infallible knowledge of geography.

Zeng secured the most points for the team, responsible for 370 out of the total 875 scored up to episode 32 of the series, according to the Twitter account 'UC Stats' (@StatsUc).

# Innovative magnet technology to accelerate the timeline for fusion

► *SPARC fusion reactor aims to demonstrate net fusion gain by 2025 through innovative magnet technology*

Marek Cottingham Science Editor

In September 2021, researchers at MIT spin-off Commonwealth Fusion Systems (CFS) reached a major milestone in their ambitious plan to build a fusion reactor capable of net energy gain by 2025. The demonstration of the high-temperature semiconducting magnets, with a field strength of 12 tesla, is a key technology hurdle for the team. These magnets are at the heart of their proposed design, which if successful, pave the way for the construction of the first fusion power plant by 2030.

Fusion reactors have long been identified as a highly desirable energy source. First, they have a small environmental impact, using small land footprints and small quantities of fuel to operate, without emitting greenhouse gases. Additionally, they provide a consistent controlled source of power, independent of the weather or the hours long startup time of fission reactors. They are inherently safe, incapable of the runaway chain reactions and disastrous accidents of fission reactors. Finally, while they do produce some radioactive waste, this radioactivity will decay to safe levels on a timescale of decades, rather than millennia, making the waste far easier to dispose of.

Fusion reactors operate via the fusion of the hydrogen isotopes deuterium and tritium, which releases energy. Deuterium (D) nuclei possess one proton and one neutron, while tritium nuclei possess one proton and two neutrons. Deuterium is found naturally in low concentrations in Earth's oceans, bound with hydrogen to form heavy water (D<sub>2</sub>O). It can be extracted through established industrial processes. However, the natural abundance of tritium is too low to allow for practical extraction methods, so most tritium is produced industrially through the irradiation of lithium-6 with energetic neutrons in nuclear reactors - a process referred to as tritium breeding. While currently performed in fission reactors,

new fusion reactor designs like SPARC (which stands for Soonest/Smallest Private-Funded Affordable Robust Compact) aim to allow fusion reactors to take over tritium production.

However, fusion energy generation faces a host of complex problems. One such problem is the physics of controlling the plasma, which is at a temperature of 100 million °C. This high temperature is required in order to ensure that the deuterium and tritium nuclei - which make up the reactor's fuel - have enough energy to fuse; it also means that they move at extremely high speeds. A magnetic field can be used in order to contain these fast-moving plasma particles. However, the motion of the charged particles within the plasma, combined with their complex electric and magnetic interactions, leads to the development of waves within the plasma. This can disrupt the shape of the plasma, stopping fusion or causing the plasma to hit the reactor walls.

The high magnetic field planned for SPARC is hoped to make this problem easier, by allowing for the plasma to be confined within a much smaller volume and suppressing the waves which arise as the plasma is compressed.

The stronger magnetic field is only possible due to the recent innovation in superconducting magnet technology. Previous designs for tokamak type fusion reactors - a common reactor design which uses magnetic fields to contain and compress the plasma - use low-temperature superconducting materials, such as niobium-tin (Nb<sub>3</sub>Sn). These materials limit the strength of field achievable, thus requiring that the fusion reactor be made larger in order to reach net energy production. A larger reactor inevitably leads to higher costs and long construction times, such as those experienced by the ITER reactor in France, under construction since 2007.

SPARC instead uses rare-earth barium copper oxide (REBCO), a high-temperature superconductor capable of achieving twice the maximum

field strength compared to niobium-tin. This is commercially available in the form of a steel and copper backed superconducting "tape", which can be wound in order to form a magnet of the desired shape. REBCO has only become a viable option in recent years, as it has become possible to manufacture the necessary quantities at a viable price.

Innovation in the magnet design will also help SPARC and its successor ARC to overcome the tricky problem of containing the neutron radiation from the fusion reaction.

Conventionally this is done using a neutron blanket, which consists of hundreds of panels made from neutron stopping materials. These panels require complex cooling systems to remove the heat released by the emitted neutrons and must be assembled with absolutely no gaps, so as to prevent radiation escaping and damaging the outer components. These plasma facing components degrade far more quickly than the rest of the reactor, likely requiring that they be replaced yearly in a commercial reactor. Conventional neutron blankets must be disassembled piece by piece, passing the pieces through the cramped space between the electromagnets so as to achieve this. The cost and complexity of this is so high that many critics see it as the killer flaw of fusion as potential power source.

SPARC proposes to replace this labour-intensive assembly with a single-component vacuum chamber, which will be immersed in a tank of the molten salt FLiBe - containing fluorine, lithium and beryllium - at a temperature of over 460 °C. The liquid FLiBe serves double duty, as both the neutron absorber and cooling fluid, which can

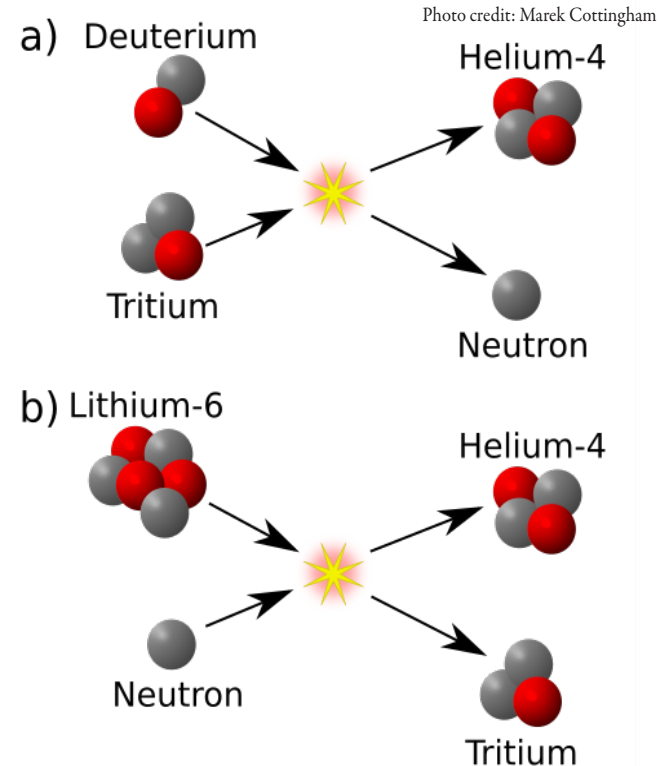


Figure 1: a) Fusion of deuterium and tritium to form helium-4 and an energetic neutron. b) Absorption of a neutron by lithium-6 to form helium-4 and tritium.

be pumped through a heat exchanger to remove heat from the reaction vessel. There is only one problem: how to replace the tank and vacuum chamber when they are intertwined with the superconducting magnets like links on a chain. CFS's novel solution is to split the magnets into two sections, joined together by superconducting jumpers, which can be rapidly disassembled to allow the entire inner section to be lifted in or out of the reactor.

The choice of FLiBe also carries another advantage. As the FLiBe absorbs neutrons, some of the lithium atoms will be converted to the hydrogen isotope tritium, the rarer of the nuclear fuels used in the reactor. This process would allow the reactor to produce more tritium than it consumes, reducing the cost of producing fuel for the reactor.

It is through this combination of technological innovations in the reactors' magnets, cooling and radiation shielding that Commonwealth Fusion Systems hopes to rapidly drive down the cost of nuclear fusion, bringing it into the realm of commercial viability.



## STRUGGLING WITH DIABETES AND FOOD CHOICES?

### Have you considered participating in a nutrition study?

#### The study

The aim of the study is to identify foods that produce the most favourable blood glucose profile over the course of the day. This way we can produce a portfolio of suggested food swaps that individuals with type II diabetes can incorporate into their diet to regulate changes in their blood glucose concentrations.

#### Qualified participants must:

- Be between 18— 65 years old
- Be diagnosed with Type 2 Diabetes
- Be on the same medication for the past 3 months
- Other criteria may apply.

#### Qualified participants receive:

- You will receive £10 travel expenses compensation for the first visit and £50 compensation for both study visits thereafter, with a further £10 for travel expenses.
- Health check up and medical support.

#### Research led by Imperial College London:

Nunzia Altieri, Pre- Doctoral Fellowship, Imperial College London.

Jennifer Pugh, PhD student, Imperial College London.

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Imperial College  
London

## ARTS

» **TRULY DYSFUNCTIONAL...**  
 BY VAIDHISWARAN RAMESH  
 JUST TWO STARS FOR THE HAMPSTEAD  
 THEATRE'S THE FEVER SYNDROME.

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Edited by:  
 ALEXANDER COHEN  
 ALEX JACKSON

## Opera

# *The Handmaid's Tale* — Invisible Figures

## The Handmaid's Tale

★★★★

Credits: Photo/ Jennifer Reynolds

**Where?** London Coliseum  
**When?** Until 14th April 2022  
**How much?** Free for under 21s

Reviewed by **Alexander Cohen** Arts Editor

As the audience enter the London Coliseum, the handmaids' red jackets, symbols of their oppression, dangle on stage inhabited as if being worn by invisible figures. It is both a fitting and haunting image that aptly summarises the concrete vision of artistic director of the ENO Annilese Miskimmon's directorial debut: to shine a light on unheard voices.

*The Handmaid's Tale* traces the inner life of a woman living under the dystopian theocracy of Gilead where fertile women are forced to be handmaids who are ceremonially raped in a quasi-biblical ceremony. With the Amazon TV series adaptation of the original novel, and Atwood's sequel releasing in 2019, *The Handmaid's Tale* has as ingrained itself within popular culture. The now iconic red cloaks are even frequently donned at women's rights protests across the globe. But what can a new production of the opera adaptation add to the conversation?

Unlike the TV series, where every nook and cranny of Gilead is brought eerily to life, here the world of *The Handmaid's Tale* is left to the audience's imagination with a simplistic set; a green clinical coloured curtain borders the stage with a pink curtain descending to mark the house where Offred is assigned to be used as a handmaid. Instead, the production focuses on Offred's inner turmoil which fully inhabits the space.

Poul Ruder's raw minimalist score maps each of Offred's emotional triumphs and obstacles. Conductor Joana Carneiro draws the grounded and muddy elements out of the music; trumpets spatter, spit, and growl at Offred as if they are the oppressive regime oppressing her. There is no hope of relief from the sweet hum of a string instrument other than the hymn Amazing Grace that is here demonically inverted, playing over each ritualistic rape scene.

Kate Lindsey's (Offred) voice is stern but agile. Her intense longing for freedom forges a clear sense of hope and she deftly navigates Paul Bentley's winding libret-



to. Trying to cram so much narrative background into a just over two-hour opera means that some of the story is rushed. Those who are not familiar with the novel might become lost in the dense world. But creative directorial decisions make the story easily digestible; memories of Offred's real family from the "time before" Gilead are particularly haunting, projected onto stage with a grainy black and white film.

Avery Amereau is a fiery Serena Joy, the wife of Offred's commander who rapes Offred ceremoniously. For such a cruel character, Amereau weaves a real amount of sympathy into her portrayal, Serena's jealousy sparked from deep-seated insecurity that Amereau slowly unravels.

The opera is probably not a must see for fans of Atwood's dystopia. But in the context of the opera world, it is essential. Given that many canonical works in the repertoire are mired by a legacy of misogyny, *The Handmaid's Tale* stands out as a bold, unabashedly feminist opera that puts a woman centre stage to explore female issues rarely explored in opera.

## Poetry Corner

### *My blue shirt left in an arid sun*

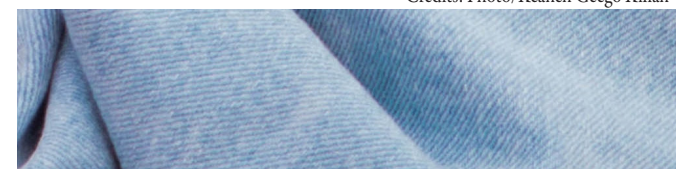
By **Alexander Cohen** Arts Editor

I like to forget that you exist, but I only know this joy when you are remembered and the joy no longer lasts.

A pleasure known with hindsight, a pleasure that will always last the memory of touch and skin and the kiss of corduroy linger. But memory fades like colour from a shirt left in the arid sun too many hours enjoyed under its earnest attention.

All that is left is scorched, I remember cloudless days clad against pressed velvet blue, now a scorched grey. melancholy is colourless, you remain in my cupboard floating in the dark, I cannot throw you away.

Credits: Photo/Keanen Geego Kilian





## Theatre

## This is a play about politics, not a political play.

The 47<sup>th</sup>

★★

**Where?** *The Old Vic***When?** *Until the 28th May, 2022***How much?** *From £12*Reviewed by **Alexander Cohen** Arts Editor

Mike Bartlett's *The 47<sup>th</sup>* imagines Trump running again for office in 2024. Biden is senile and Kamala Harris harbours presidential ambitions. The plot meanders around Shakespearean corners. There are Machiavellian plots, surreptitiousness, and scheming. The result is a play that is more entertaining than thought provoking.

The play always feels in the shadow of Charles III, Mike Bartlett's critically acclaimed Shakespearean "future history" play imagining the Prince Regent taking the throne. Stylistically speaking it is *The 47<sup>th</sup>*'s predecessor; both are written in blank verse and both are in heavy conversation with Shakespeare, borrowing themes, symbols, and tropes. But casting Charles as a Shakespearean tragic hero worked in that it gave him a reasonably vanilla character in the grand scheme of geopolitics, some intrigue and sexiness, allowing audiences to genuinely question whether he could be a sympathetic hero or a hubristic villain.

But none of the subtlety, nuance or balance of perspectives is present in *The 47<sup>th</sup>*, a play that revives the chronic liberal Trump-bashing virtuousness that seemed to have subsided once the ersatz despot was voted out. Trump is a villain yes. Trump is snarky yes. Trump looks a bit freakish yes. But we know this already. *The 47<sup>th</sup>* does little to add to the political conversation by catering to our impression of him rather than

Bertie Carvel as Donald Trump in *The 47<sup>th</sup>*

wanting to challenge it. Shakespeare's best villains have moments of heartfelt compassion that lets the audience reassess their moral stance towards them. Shylock's 'If you prick us, do we not bleed?' speech or Claudius' lament: 'O, my offence is rank it smells to heaven.' Trump has no moment of self-awareness. Why? Because Trump is Trump. Because we, a Merlot sipping liberal audience have to, and always will, hate him.

Portraying Trump as a laughing stock made for a cheap laugh back in 2016. But the shtick dissipated

quickly because Trump really was a buffoon; there was no SNL sketch or Spitting Image hot take to add a satirical spin on the President. *The 47<sup>th</sup>* rehashes the same tired platitudes that were thankfully put to rest after Biden took office. But Bartlett's writing is highly polished. He does a masterful job in interweaving the Trumpian jargon and idiosyncratic speech with Shakespearean poetry and imagery. It is a shame that his script does not lead us anywhere we have not been before.

Whilst this does not make for a politically intriguing production, Bertie Carvel's hypnotic performance as Trump ensures that it is an entertaining one. From his penguin-like gait to the self-satisfied smirk, his uncannily accurate appearance induced gasps from the audience on his first appearance: driving onto the stage in a golf cart. Tamara Tunie's Kamala Harris is equally accurate and fun to watch. An icy Lydia Wilson portrays Ivanka Trump as a Lady Macbeth-like schemer. Her emotionless performance is chillingly enjoyable and her relationship with her father is enthralling as it is creepy. The QAnon Shaman even makes an appearance as a surreal apparition, whirling up a crowd into a tightly choreographed frenzied mob in-between scenes.

As a play imaging his return, *The 47<sup>th</sup>* does little to investigate the life behind Trump, instead choosing to cater to a liberal audience who want to see nothing other than his unceremonious downfall. It is a play about politics. But it is by no means a political play.

Josh Carter as Shaman, and the Ensemble, in *The 47th*

## ARTS

## Theatre

## A drawn-out American get together

## The Fever Syndrome

**Where?** *Hampstead Theatre***When?** *Until 30th April 2022***How much?** *Tickets from £10*Reviewed by **Vaidhiswaran Ramesh** Arts Writer

*The Fever Syndrome*: written by Alexis Zegermen and directed by Roxanna Silbert is currently showing on the main stage at the Hampstead Theatre, and the offering: observing a dysfunctional American family, with a LOT going on! The play follows the Myers family, not your run-of-the-mill American family, as they discuss money, science, and air their troubles over the course of a little under a day!

The characters of this family are rooted deep in stereotypes of the science and cultural milieu that personifies the East Coast. Prof Richard Myers (Robert Lindsay), the proudly Met-loving New York scientist who pioneered IVF research, who along with his third wife Megan (Alexandra Gilbreath) hosts their three children on the eve of Myer's acceptance speech for his recent Lasker award (the 'American Nobel' for medicine).

Dorothea (Lisa Dillon), the eldest sibling is a scientist herself (and on the board of *Science*) with a teenage daughter (Nancy Allsop) suffering from a rare genetic disease (The eponymous Fever Syndrome). The twins, Thomas (Alex Waldmann) and Anthony (Sam Marks) are a pair of eccentric unsure men, who just like Dorothea cling to their towering father for recognition and affirmation every step of the way.

Home for a dinner and just under a day, we watch this family implode over trivialities as the bottled-up anger rises to the foray, unleashing unresolved childhood trauma. There are some very well thought out themes of such dysfunction within the

play, but there is one too many squeezed in—even for a play over 2 hours long—for them to be anything more than side notes and catch phrases.

The story struggles to find space for any of the themes inherited. We buoy from having discussed cryptocurrency and investment options one minute, to a failed marriage proposal, and, just minutes later, are forced to accept a poignant reconciliation! And it is not just the siblings who have issues, but Richard Myers himself, who under the throws of Parkinson's has fleeting visions of his teenage daughter tormenting him



A modern scientific American family

for, presumably, failing to be a better father. Individually these elements work and seem plausible but the lack of baggage in the emotional weight of the characters between one scene and another makes the whole play seem disjointed and improbable!

In the acting department, Robert Lindsay provides

a standout performance as the patriarch of the Myers' family. A pioneer of the IVF technology, who amongst other things, in his spare time enjoys GOP bashing, mixing up tunes to inappropriate inside jokes about his son-in-law, and shuttling between being an absent father to a perfect one who knows exactly what to say at the right moments.

Having science feature prominently in a play is always a tricky endeavour! To pull it off successfully with engagement needs a lot of exposition — while the play has enough of it, it unfortunately seems to have been largely landed down on the shoulders of Nathaniel Cooper, Dorothea's husband (played by Bo Poraj) giving his character little to do otherwise!

The set design, one of the most elaborate in recent times at the Hampstead Theatre, is intricate, detailed, and grand! Featuring a profile view of three stories of a New York apartment, it allows us to observe the drama

unfolding within the family, one room and one sibling at a time. In the foreground is a dinner table, a couch, and a pianoforte for Myers to dish out Chopin, overall, more real estate than the average zone 1 London apartment. The lighting in particular is stellar considering how most of these rooms are boarded up on three sides and the audience gets an extremely limited vista into these quarters.

With an otherwise generic plot of a dysfunctional family - the play is moderately tame and beaten! But for £10 it is hard to walk away disappointed, especially given the stellar performances and the amazing set design — if anything it gives enough food for thought for us STEM students on the difficulties integrating science into a popular medium!

## On or Off Term...

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Check out our website for the latest reviews!  
www.felixonline.co.uk

**Easy Sudoku**

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

**Normal Sudoku**

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

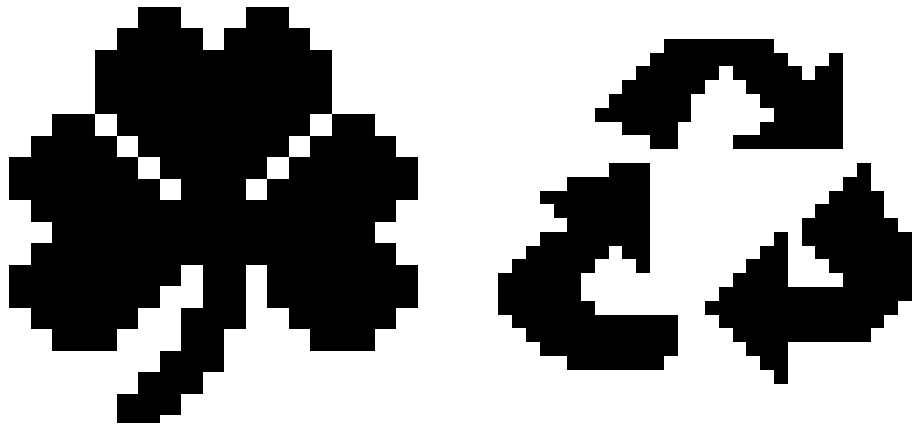
**Difficult Sudoku**

		3		8				
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				9			1	
9			2			7	4	
			6		9			

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

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

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



**Reverse cryptic**

Dogs' appendages are cur-tails. CURTAILS means cuts.

Run-down Polish = SHOPLI. Unit = FT. SHOP-LIFT means thief.

"Open" scyTHE Taken to get THETA, which is a letter.

1	☛	1						
1	1				2	☛	1	
		2	2		☛	3		
	1	☛	☛	3		☛	1	
			☛			1	2	
☛	2	2		1	1		2	☛
	2	☛	1			☛		
	1				2		1	
			1	☛	1			

**Points**  
 Easy, Normal, Difficult sudokus 2, 3, 4 pts each  
 As always, you can send your solutions to fsudoku@ic.ac.uk before Wednesday at 12:00!

**Regular Crossword**

B	A	C	K	P	A	C	K		K	I	S	S	E	R
O		R		R		A		N		T				U
O		T		H		O		R		O				U
T		R		F		Y		H		I				A
L		O		O		S		E		D				R
A		P		S		O		S		I				S
C		R		I		M		S		O				N
E		C		I						E				G
		P		A		R		O		L				E
F		L		N		X		N		I				A
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A		R		L		R		E		A				H
N		A												S
C		I		S		S		I		L				R
E		N		T		O		M		B				S

**Cryptic Crossword**

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**Sorry  
 No leader-  
 board this  
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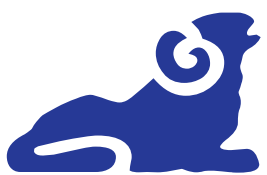
2	2			12										
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								9	3		6			
					5						6			
								2						5
								8	3					
					5									16
2					2					7			2	2
					2					6				5

CATNIP

# Union 110: The Rise of Wong

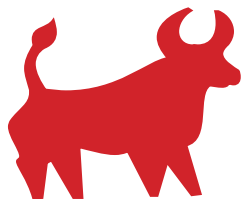
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## ARIES

This week you're just a stone's throw from breaking the glass ceiling



## TAURUS

This week your call is used for training purposes



## GEMINI

This week you prank your friends by hiding live quails in the eggs for the easter egg hunt



## CANCER

This week you have smashed avocado by eating one, skin on, after finishing ten shots of vodka



## LEO

This week your misogyny trumps your lactose intolerance when you refer to a large pair of breasts as 'milkers'



## VIRGO

This week you throw a dart at a map to decide your next holiday destination, but hit your kid in the eye



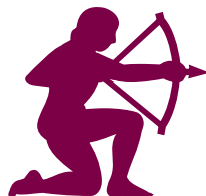
## LIBRA

This week you weigh more than Floyd Mayweather and can probably bench more than him so surely you could beat him in a fight



## SCORPIO

This week you attempt to play charades whilst driving on the M25



## SAGITTARIUS

This week your academic career comes to an abrupt end when your supervisor discovers the experiments you've been doing on the mice in your spare time



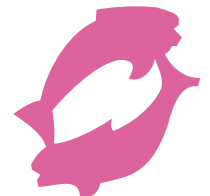
## CAPRICORN

This week you misunderstand the Uber payment method and try to get a free ride by jumping out whilst heading down King's Road



## AQUARIUS

This week you key your ex's eScooter



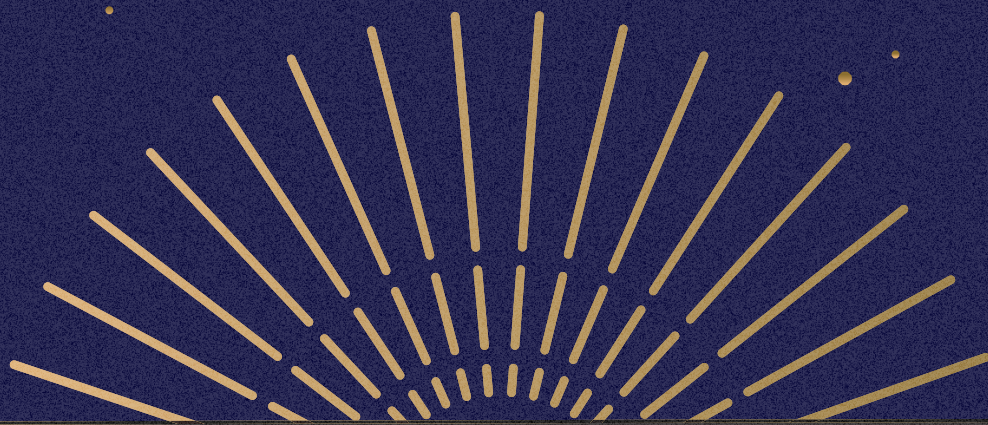
## PISCES

This week you assure yourself that a nocturnal schedule and random bouts of crying are normal and healthy

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# MUSIC

Edited by: TARA PAL CHAUDHURI  
JOE RIORDAN

## Album of the Week

### Skinty Fia by Fontaines DC

I'll admit I haven't had an in-depth listen to Fontaines DC but I love the hits, think 'Liberty Belle' and 'Boys In The Better Land'.



The Irish band's new album *Skinty Fia* is an incredible listen, and would have got a full review if exams weren't coming up, but they are so you'll just have to deal with a side column for now. Exploring Irish identity away from home, as the band have relocated from their home of Dublin, lets the lyricism



mature from the early days of *Dogrel* while keeping to the well-loved post-punk sound. Some stand-out tracks for me are 'I Love You' and 'Big Shot'.

## TODAY IN MUSIC HISTORY

IN 1998, AEROSMITH WERE PLAYING IN ANCHORAGE, ALASKA WHEN DISASTER STRUCK

DURING THEIR ENCORE. LEAD SINGER STEVEN TYLER HIT A MIC STAND WITH HIS KNEE TEARING HIS CRUCIATE



LIGAMENT. DESPITE SOLDIERING ON THROUGH THE FILMING OF A MUSIC VIDEO FOR 'I DON'T WANNA MISS A THING', THE BAND WERE FORCED TO POSTPONE THE LAST 14 DATES OF THEIR TOUR DUE TO TYLER'S OBVIOUS NEED FOR SURGERY.

## Album Reviews

### I'm a Wet Leg Convert, Here's Why

*The indie duo's eponymous debut has certainly justified all the hype and anticipation surrounding it.*



View online here!

Written by **Amanda Paul** Music Writer

I will be honest, I first came across Wet Leg via a 30 second snippet of their debut single 'Chaise Longue' on TikTok (that's right, I'm on indie TikTok) and found it repetitive and unremarkable to say the least. Fast forward to now and I have the album on repeat. Hey, at least you know I'm being completely impartial.

Throughout the album, the two-piece's characteristic driving basslines, punchy guitars, and whimsical lyricism make for a danceable sound that has me wishing I was frolicking in a field with them. The combination of Hester Chambers and Rhian Teasdale seems like a match made in heaven. The way the two have woven together the rich tapestry of guitar and vocals is a testament to how they have honed their musicianship, both individually and collaboratively. The two have joined forces to birth a record of delicious millennial angst set to loud guitars and it's a good one. They are joined by a competent rhythm section which adds the accompaniment needed to really make the tracks shine.

Despite the earlier singles from this album demonstrating a more tongue-in-cheek, suggestive side to Wet Leg's lyricism, such as the repeated utterances of "touching yourself" in 'Wet Dream' and "I got the big D" in 'Chaise Longue', the duo manage to make room for more serious matters of the heart in tracks like 'Piece of Shit'. Of course, they put their own delightfully scornful spin on it - talking about an ex-lover, they say "you're a good guy, alright, whatever helps you sleep at night". I just lap up the tastefully distasteful, biting remarks they sprinkle into the album; I'm a sucker for their writing.

The pair have struck a fine balance between upbeat and more intriguing, mellower songs. 'Loving You', the stand-out track for me, sees the crunchy, guitar-driven sound take the passenger seat as synths, electronic

drums, and even an accordion play a more central role. It's a welcome side of Wet Leg to hear, showcasing a more delicate style with a rich texture that's dripping



in sweetness. Teasdale's vocals here sound otherworldly, maintaining a delicate, almost fragile quality. This, coupled with the quieter production, made me think the song was a tender ode to a lover upon my first listen and so I sent it to my boyfriend because it reminded me of him (a quick google of the lyrics made me realise my fatal error). With scathing lines such as "you're just rubbing one out up in the shower" and "hope you're choking on your girlfriend", definitely do not send this to a significant other.

I can't help but talk more about Teasdale's multifaceted vocals; at times I found myself wondering whether the track contained a feature. Her ability to dip into and out of different accents, the changes in tone, and her range left me stunned throughout every song, a true vocal chameleon. Credit must also be

given to Chambers who seems to know the exact tones and sounds to squeeze out of her guitar to complete every track perfectly.

What I like most about Wet Leg is that they don't really take themselves too seriously. They're not trying to preach or be irritatingly profound in their work. Instead, they've captured the spirit of the twenty-something woman, revealing her relatable experiences through headbang-able tracks and

tackling difficult growing-up feelings to a soundtrack of catchy melodies. All in all, this is a strong debut and I'm excited to see where Wet Leg will go from here.



FRIDAY 29TH APRIL 2022

## Gig Reviews

MUSIC

# No darling, it's not a china shop! What do you actually think it is, give it another go.

*It's YorkLife festival and Bull are performing!*

Written by **Joe Riordan** Music Editor

After remembering I hadn't put a parking ticket in my car and running back to buy one, I made it to the YorkLife stage set up in the middle of Parliament Square in York, just in time for Bull's set to start. I first saw the band support Sports Team in 2019 and now I kick myself for not appreciating them enough. Hours of listens over the past year and missing them play down the road in London earlier this year built up a need to see them again.

Standing outside at 7pm in York, it was getting cold as Bull took to the stage with 'Bedroom Floor', the dreamy opener of their debut album *Discover Effortless Living*. Their vocals were noticeably plastered with reverb, transforming the freezing square into a soothing dreamscape. The expected instruments were joined by a surprise recorder (maybe a tin whistle, don't quote me on this) solo from lead singer Tom Beer during the (as far as I'm aware) unreleased song 'Imaginary Conversations In My Head' which definitely felt imagined because how else would I witness a tin whistle solo? It was unexpected but now I want to watch it again, and again. The eclectic mix of instrumentation was constantly expanded with a definite recorder solo later in the set, a mini keyboard for Beer to solo on, and a plethora of guitar effects.

In roughly every other song, lead guitarist Dan Lucas took a solo and delivered every time. For the most part, these jangly, crunchy pieces epitomised the band's indie rock sound, drenched in intriguing effects. In an unreleased song I didn't catch the name of, heaps of phasers created a swirling grunge effect for a more chordal solo. Later, about halfway through the set, a small 8-bit style solo orchestrated Beer's outfit change (taking his jumper off). I can't mention outfits without three special mentions: bassist Kai West was dressed for the Wild West in a blue cowboy shirt and hat; Beer sported a crocheted hat for half the gig until it flew off as he jumped around the stage during a particularly energetic breakdown; Lucas revealed a tastefully garish knitted/crocheted green and pink vest after another quick jumper removal. The clothing complimented what was shaping up to be a memorable set.



Nearing the end of their set, Bull treated the crowd, which was a mix of diehard fans, intrigued passers-by, and people waiting for The Howl & The Hum, to another new song, 'Tired Of Being Treated Like A Twit'. This is where Beer's keyboard took the spotlight, performing an 80s style part before falling off its stand at the end of the song. All this built up to my favourite song of the night, the final track of the set, 'Perfect Teeth'. With his keyboard still on the ground, Beer was up and down as he sang and then played some riffs. His vocals must also be given a mention – they were so versatile, going from soothing and airy to screaming and shouting, all within the space of this finale. The vocals were accompanied by shimmering guitars in the beginning, growing fuzzier as the song progressed. I would love to take a look at Lucas' pedal board; I was entranced by the different effects he managed to showcase in a set that I wished lasted longer. Bookmarked by a drum solo, the set ended with shouts for one more song from the crowd that were sadly crushed by the tight schedule of the night.

Hailing from Yorkshire too, I have a bias for Bull but cannot emphasise enough how much you should try to catch them on their upcoming run of gigs supporting fellow indie rockers, FEET, this spring. You'll love it.

## Single Reviews

## 'As It Was' is a treat for the ears (and the eyes).

*Harry Styles has released the first single for his latest album, Harry's House, and I can't get enough of it.*

Written by **Zanna Buckland** Books Editor

'As It Was' is euphoric and catchy, with every necessary element of a hit single squeezed into a measly two minutes and 47 seconds. It's like a pop song on crack, and I love every second of it. The electronic motif that opens the song is infectious, and the infection only spreads as you continue listening. Harry's clear and mellow tones are easy on the ears and allow for fans to pick up the lyrics quickly, such that performances of the song only two or three weeks after its release already have entire festival crowds singing along.



The music clearly draws from the nostalgia of 80s synth numbers, a trend for many artists at the moment, including Dua

Lipa and Years & Years. While following the crowd isn't necessarily a good thing – I myself have haughtily and hypocritically shunned the 'No. 1' on many occasions – in this case it is perfection. Call it what you want, but there is no denying that Harry has tapped into some songwriting gold.

The accompanying music video is equally as glorious, with a red-bedazzled Harry dancing around like a perfectly in-tune maniac. His co-star Mathilde Lin is an accomplished dancer and model, who complements him perfectly and wears a matching sequined jumpsuit but in royal blue. The stunning sets include a colourfully graffitied room and a swimming pool with a white minimalist structure bridging it.

You don't need me to tell you that the track is brilliant: it broke the record for most Spotify streams in one day, with 8.3 million – 0.3 million more than Olivia Rodrigo's 'driver's license', the previous title holder. One of Harry's tricks was to tease the song's release with just its motif on social media, leaving his followers curious and wanting more.

Clips of recent performances at Coachella show just how talented a rockstar he is, demonstrating flawless renditions of his numerous popular songs, as well as showcasing covers of 'I Will Survive' and 'Man! I Feel Like a Woman' featuring the glamorous Lizzo and Shania Twain, respectively. Having been to a concert on his first tour, I can safely say he has blossomed as a fully-fledged solo star, and his talent and confidence have only grown since the release of his self-titled debut album.

No shade to One Direction, but the Harry Styles of today is a far cry from the one of six years ago, and an incredible one at that. His third album (due to be released on May 20th) is sure to bring more of the same, and better.



ODDS AND ENDS

# SURVEY!

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