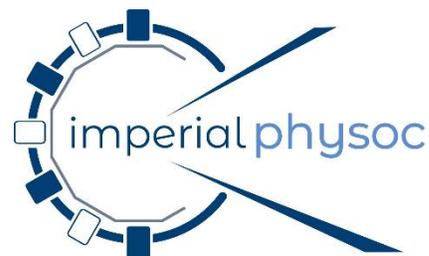




LUCIDUS

OCTOBER 2020 PHYSOC NEWSLETTER



Research Frontiers IV by Dr. Hannah Williams Artificial Quantum Matter

9th November 12pm-1pm

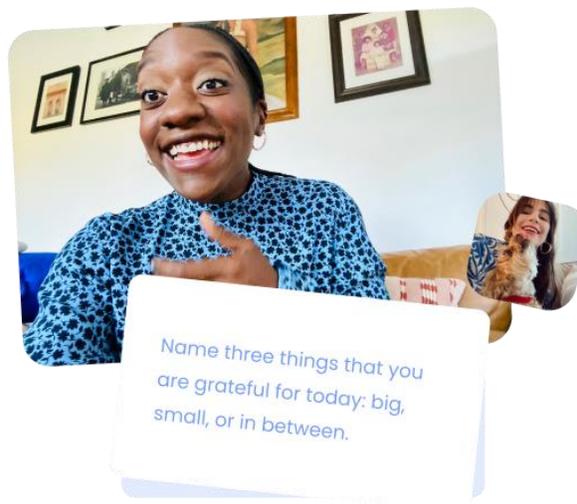
Abstract: "Matter is made up of interacting particles, in order to truly understand how the universe around us behaves on a quantum level we need to simulate such systems. Theorists have done a good job so far of creating the maths and tools we need to achieve this, but they hit a brick wall when trying to simulate systems of more than 40 particles. To overcome this Feynman suggested building a computer out of "quantum mechanical elements which obey quantum mechanical laws", and this is exactly what many people are trying to do. I am working on an experiment which uses individual atoms trapped in an array of optical microtraps "tweezers". In this talk I will tell you why quantum simulators are important, describe the experimental setup and show exciting new results where we go far beyond what is possible with a classical computer."

Ice Breaker

22nd October 6:00pm-7:30pm

Meeting new people can be hard with the restrictions in place. However, do not worry, PhySoc has the solution! Ice Breaker will be an event entirely designed for you to meet new people. The platform that we will use (icebreaker.video) will match you with random physics students and you will get to play some ice breaking games to get to know your cohort a little better!

So, if you are tired of Teams calls with hundreds of people, closed cameras and muted microphones, join us on this social adventure! [Here is the link for the event.](#)



Discord Server

Our student Saeed Sanei's initiative for a virtual computing suite:

Missing the space where you just casually drop in to chat to friends as you 'work' on that lab report? Where you can all be stuck on that problem sheet together? Want a break from the formality of working on Teams? Then the Virtual Computer Suite is for you. It's a Discord channel for all physics students, aiming to provide an easy to use and relaxed space to come and go as you please. With plenty of channels for problem sheets, labs, or gaming, it's easy to find a corner for you and your friends to talk, send LaTeX'd formulae, and work together from home. [Here](#) is the link to access it.

VOTE IN THE AUTUMN ELECTIONS

Don't forget that elections are coming soon! Voting will be open today, 19th October, at 12:00 and will close on Thursday 22nd October at 14:00. You can find more about who is running in the Physics department and their manifestos [here](#).



VOTE 19 - 22 October
imperialcollegeunion.org/elections



DEVELOP YOUR SKILLS

Latex Workshop
21st October 12pm-1pm

LaTeX is a high-quality and free typesetting system, and you can use it for your lab reports. Why to choose it over Microsoft Word? Although it might be harder to learn at the beginning, LaTeX allows an extremely smooth reference updating process (e.g. labelling figures, bibliography), moreover the template is more robust, meaning that there is no way you are going to accidentally lose it while writing! To help the starting in, PhySoc has organised some LaTeX workshops during the first term, with the aim of teaching how to use the lab-report template properly (e.g. writing sections, adding figures and bibliography). The first workshop will take place on Teams on October 21st at 12pm BTS and will be held by Karim El Din (3rd year physics student).

LATEX

Engineering and Science Careers Fair
19th -25th October 2020

[The Engineering and Science Online Careers Fair](#) will provide you with the opportunity to explore a wide range of companies in the engineering and science industry looking to recruit Imperial students. The employers will have a range of opportunities including short insight days/weeks, summer internships and full time graduate programmes.



You will have the opportunity to view employer details on individual webpages and book a place to attend 20 minute 'Pitch Presentations', where companies will be able to give a brief outline of their opportunities and processes as well as take questions.

Alumni Insights: A Career in Robotics

4th November
5.30pm - 6.45pm

Alumni Insights events are designed to inform and inspire, providing a unique opportunity to hear from alumni who are experts in their field. Alumni will talk about their career in the field of Robotics, what attracted them to the sector and challenges and opportunities they have met along the way. The panel will also share their thoughts on how the sector is evolving and opportunities and suggestions for career progression. After the panel discussion there will be a Q&A. The panel will be chaired by Dr Edward Johns, Director of the Robot Learning Lab at Imperial College London.

Panellists:

- Dr Feryal Behbahani (MSc Computing (Artificial Intelligence) 2018, PhD Computing 2018) - Research Scientist, DeepMind
- James Walker (BSc Physics with Theoretical Physics 2012, MSc Quantum Fields & Fundamental Forces 2014) - Software Engineer, Automata
- Orfeo Nicolai (MSc Innovation Design Engineering 2018) - Head of Software, Karakuri

This is a free virtual event open to Imperial staff, students, and alumni. [Sign up here to receive the joining link.](#)



Energy Society Careers Fair

21st October
1pm-5pm

Dear Physics students, next week we will be hosting our annual Careers Fair - one of the biggest events we host each year - with representatives from a wide range of companies (from Fusion Technologies to Sustainable Energy providers). Physics department have always provided one of the most talented and skilful specialists and we believe your attendance will be greatly rewarded by mutual interest from our participants.

Starting off at 1pm on the 21st of October, the Fair will last for a substantial part of the working day up till the late afternoon (5pm). Within this four-hour period, you will have an opportunity to network with top recruiters in the energy division and discover their recruitment schemes such as summer placements, internships, and graduate schemes.

For more information please check out the [event brochure](#) below, and to register use the JobsLive [registration link](#). We are looking forward to seeing you at the event!



Imperial Young Professionals

To sign up to the below events & receive Zoom details, [click here](#). You'll receive a Calendar add-in link so you won't miss our events.

Career Lessons We Learnt Too Late - 18:30 Monday 19 October (Zoom)

As your alumni, we feel obliged to tell you about all the mistakes we've made both in Imperial & in work that could save you pain, struggle and uncertainty. So come for a light-hearted but brutally honest and highly informative talk, so you don't fall down the same pitfalls and make the best choices for your career. Ask us any questions at the end!

Finance Interview Skills Workshop - 18:30 Thursday 22 October (Zoom)

If you successfully pass the CV stage, it's on to interviews! But finding information online is often generic or worse, leads to even more confusion. Luckily, your alumni are here to lend a helping hand. After this talk you will understand:

- the different interview formats & types of questions that will be asked
- what the questions are they actually asking
- how to best prepare

Our advice will be presented at an advanced level, making it appropriate for all levels of applicants.

A Message from Our Wellbeing Rep

The Year Ahead

Without doubt, this is a turbulent time for you.

First years, you may have the shock of moving to another country to study, and some will be getting used to living on your own for the very first time. Collectively, we're all adapting to, and dealing with, everything that comes along with

an almost entirely virtual university experience. For some, this means that we're having to develop new strategies to continue to take care of ourselves. For others, this means your personal wellbeing has taken a bit of a back-burner over the past few months.

Either way, I want to ensure you that the wellbeing reps and I are here to do what we can to support you. This will involve social wellbeing events, awareness talks, self-care campaigns, and so much more.

Anonymous Suggestion Box

Continuing from last year, the academic and wellbeing reps will be carrying out an online anonymous suggestion box. Following this [link](#), you can raise any question or concern with reps and we'll voice it to the department on your behalf.

Virtual Common Room

Given that we can't make use of our physical common room in Blackett, there's a [virtual common room](#) available to all physics students on Teams. You can use this for anything from hosting games nights with friends to pinning digital posters on the poster board for your society or club.

That's all from me for now, I wish you a lovely rest of your week and please don't hesitate to get in touch with me about any and all things wellbeing related.



Anthea

A Message from the Editors

Hello everyone! I am Marius Ignat, and along with Bilgesu Aydın, Lorenzo Versini, Tobias Farchy, Hanzhi Bao, Assunta Felice, we create this fortnightly publication. We are looking to expand our newsletter, by including short student articles, and by promoting your scientific projects or the UROP research you've done over the summer. You can send us your short essays (maximum 300 words), including pictures at physics.society@imperial.ac.uk.

Two more things

Halloween Pumpkin Carving Competition

Send us a picture of you and your carved pumpkin at physics.society@imperial.ac.uk. The best ones will be posted on our Instagram account. The committee will pick on the most creative pumpkin, and the artist will get a £20 Amazon Voucher!

Send us your creation until the 31st of October!



PLANCKS UK

To the keen theoretical physics students out there: Now's your time to shine! The International Association of Physics Students {iaps} is a theoretical physics competition for bachelor's and masters students, who can join in groups of 3-4. We are excited to support Imperial physics students who want to participate. The preliminary rounds will be held in the University of Kent and the three teams that are chosen to represent the UK will compete at the international finals in Portugal. Find out more [here](#).



A Message from Our Sponsor

Dear Imperial Physics students,

Greetings from Optiver in Amsterdam. We would like to wish you a warm welcome to the new academic year. We hope that you all had a restful and enjoyable summer holiday.



Optiver is an international proprietary trading firm with offices in Amsterdam, Chicago, Sydney and Shanghai and we are proud to provide sponsorship to the Imperial Physics society again!

We look forward to getting to know you all a bit more during your time at Imperial College. If you would like to know more about us, you can catch us at your University Career fairs and also at our [company presentation](#) on the 26th October!

Whether this is your first semester at university or if you are a returning student, this academic year will be very different than previous and we would like to wish you a great first semester.

We look forward to seeing you soon,

Optiver

