

The Pendulum— Autumn / Winter 2025

Issue 25



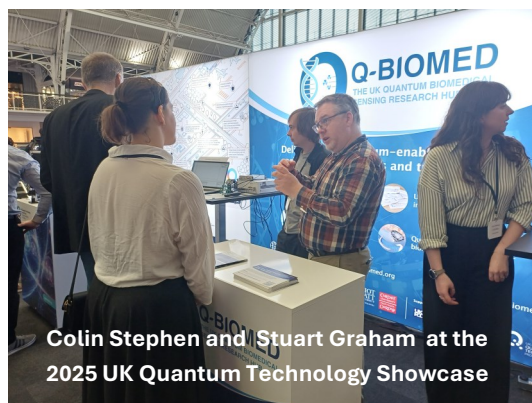
Welcome to the winter issue of the Pendulum! The first term of the 25/26 academic year flew by with many of the highlights described in the following pages.

In November we welcomed 29 Physics alumni back to campus as part of the university's 60th celebrations. The guests were given tours of The Marsh Observatory as well as the labs in Millburn House. This was a smaller scale of the July event. Thank you to all the students and staff who were involved in showcasing our research labs and guiding our enthusiastic guests across campus (in the July sunshine and the November rain!).



The Warwick Christmas lectures were a huge success again, with talks and demonstrations across two nights involving staff and students from Physics and other SEM departments. Thank you to Ally Caldecote and all those who were involved in delivering these events.

I am delighted to announce some new faces in our senior leadership team. Professor Rachel Edwards has started in a new role as Deputy Head of Department with responsibility for Inclusion, Outreach and Engagement. And Professor Neil Wilson will be the next Head of Department, taking up the reins from me in September 2026. I know you will all support Rachel and Neil in their new roles—congratulations to them both.



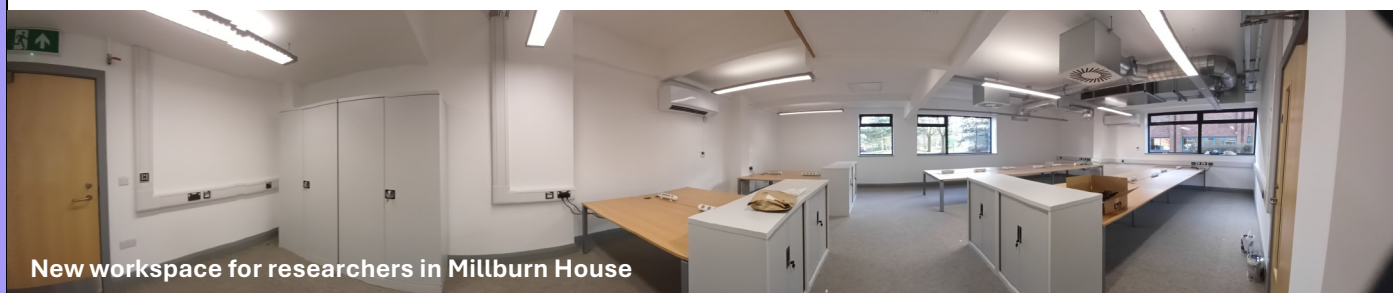
Congratulations also to Professor Tim Gershon who has been appointed to the position of Spokesperson of the Large Hadron Collider beauty (LHCb) collaboration for a 3-year term, starting July 2026. LHCb is a particle physics detector collecting data at the Large Hadron Collider at CERN. This is a significant role in the leadership of the collaboration.

There is much to look forward to this term, in addition to the lighter evenings. In March there will be the Research Celebration awards event ([nominate your colleagues](#) by 30 January!) and the Development and Alumni Engagement team are organising a Philanthropic Campaign Celebration on campus. In the coming months we should see work start in earnest on Phase 1 of STEM Connect.

All the best for a successful term.

Best wishes,

Mark



New workspace for researchers in Millburn House

Do you have a story that could be included in the next newsletter? Click [here](#) to let us know!

UK's most powerful NMR facility officially opened



UK's most powerful NMR Facilities to open in the West Midlands

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Back in August, we were proud to officially open the UK's first-ever 1.2 GHz magnet housed at Millburn House. The team, led by Professor Steven Brown welcomed colleagues from the industry to a launch event to celebrate the UKRI's £23 million investment into NMR Spectroscopy. The facility is the most powerful magnet operational in the UK, and one of less than 15 similar magnets in the world. The facility will allow better resolution and increased sensitivity.

[Read the full press release for further information.](#)

The diamonds that could find cancer

Researchers Alex Newman and Prof. Gavin Morley have developed a new diamond-based magnetic field sensor which could be used to help find tumours which have spread to the lymph nodes.

The team have worked with colleagues at University Hospitals Coventry and Warwickshire (UHCW) to develop the new sensor.

Published in [Physical Review Applied](#), Warwick researchers report they have built a new non-toxic and non-radioactive device that uses the unique properties of diamonds to diagnose metastasized breast cancer. This device is ultra-sensitive, handheld and works at long ranges, providing an upgraded solution to a regular challenge that cancer surgeons must cope with.

[Find out more.](#)



The diamonds that could find cancer

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Dr Snehalata Sahu featured in Astronomy Now magazine

Recent [research by Snehalata Sahu Link opens in a new window](#) on the discovery of a hot white dwarf merger remnant has attracted the attention of *Astronomy Now* magazine editor Stuart Clark.

Impressed by her unique blend of science and creativity, they reached out to feature her astronomy-inspired artwork in the magazine's October issue. Snehalata has been passionate about art since childhood and draws inspiration from legendary space artists like David Hardy. She likes creating digital illustrations to communicate complex astronomical concepts in a visually engaging way, making them more accessible to the general public.

You can explore the October issue (Pages 18-19) of [Astronomy Now magazine online.](#)

[Find out more.](#)

Do you have a story that could be included in the next newsletter? Click [here](#) to let us know!

World's largest scintillator detector, JUNO, now detecting neutrinos

As part of the Jiangmen Underground Neutrino Observatory (JUNO) in China, physicists from Warwick - the first JUNO group in the UK - are helping bring the world's largest liquid scintillator detector online.

JUNO has successfully completed the filling of its 20,000 tons of liquid scintillator and begun data taking.

After more than a decade of preparation and construction, JUNO is the first of a new generation of very large neutrino experiments to reach this stage.

[Find out more.](#)



**World's largest
scintillator detector,
JUNO, now detecting
neutrinos**

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Starters and Leavers (30 June— 31 October)

The department welcomes...

Nityananda Acharyya	Alex Newman
Amos Chan	Mairi O'Brien
James Clewett	Ares Osborn
Chris Cook	Christopher Patrick
Neetesh Dhakar	Nashra Pistawala
Andreas Hadjigeorgiou	Keqi Qu
Behzad Jazizadeh	William Scully
Brinda Kuthanazhi	Parinaz Tabrizian

We say thank you and good luck to...

Fernando Abudinen	James March
Adam Fisher	Sen Mou
Rafal Gajewski	Rebecca Nealon
Theresa Harrison	Miguel Ramos Pernas
Robb Johnston	Gurdev Singh
Reza Kashtiban	Martin Spangenberg

Academic Promotions

Congratulations to the following members of staff who have been promoted, effective from 1 August 2025:

Kendall Ackley to Assistant Professor, Research

Sharmila Balamurugan to Assistant Professor, Research

Keith Jewkes to Technical Facilities Officer

Tom Latham to Associate Professor, Research

John Marshall to Reader

Ben Morgan to Associate Professor, Research

Krzysztof Ulaczyk to Assistant Professor, Research

Peng Wang to Reader

Tom Wilson to Assistant Professor, Research

Congratulations to the following members who have been promoted, effective from 1 December 2025:

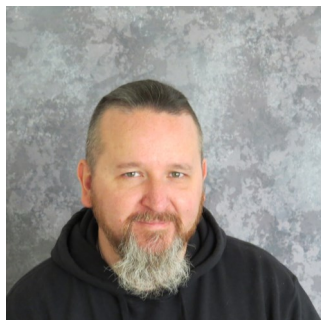
Ying Chow to Associate Professor, Research and Teaching

Marios Hadjimichael to Associate Professor, Research and Teaching

Congratulations to Ravindra Desai who has been promoted to Associate Professor, Research and Teaching from 5 January 2026

Do you have a story that could be included in the next newsletter? Click [here](#) to let us know!

Staff Profile



Name, Job title: Kevin Murphy, Technical and Building Services Manager

My role involves: I'm responsible for leading and developing the Department's Technical Services, making sure they run smoothly and fully support our teaching and research ambitions.

I also take care of the Department's buildings and facilities, ensuring our spaces work well for how we teach and research today, while planning ahead for future needs.

Above all, I aim to keep the environment safe, functional, and enjoyable for everyone who works, studies, or visits here.

My career history: I completed a degree in Marine Biology and Dynamical Oceanography at Bangor University. From there, I've done all sorts of jobs, from working in theatre and bars to Thames Water. Wanting to use some of what I'd learned in my degree, I spent six months working on a research project in Tanzania, carrying out SCUBA surveys of commercial marine species, speaking with local fishermen, and running education days in local schools.

Returning to cooler climes, I started working as a Senior Lab Technician at a school in Coventry. I spent far too long there, and after 14 years decided it was time for a change, so I moved to the University. I first worked as a Stores Technician, then a Core Technician in Chemistry, before heading up the hill to work as a Senior Support Technician for SLS and WMS. I spent three years there, from the tail end of Covid until I became the Deputy Technical Services and Facilities Manager back in Chemistry. My tour of the University's STE departments has continued, and now I'm starting another huge learning experience here in Physics.

When not at work, you can find me: I have far too many hobbies, some of which have taken a back seat over the years. Mostly, I like spending time with family and friends, going out to restaurants, the theatre, the cinema, and rock or metal gigs and festivals. When I'm not doing that, I love making things and spend a lot of time creating. I'm not great at these things, but they help calm my mind, which is always good. Previous projects have included painting, woodwork, pyrography, silversmithing, blacksmithing, and I love photography.

[You can also view other new starter profiles.](#)

Pettifer Prize Winner

Congratulations to Max Sketcher (Second year, Maths and Physics student) who has been awarded the 2025 Pettifer Prize.

The [Pettifer Prize](#) is presented annually to the first year student with the best performance in first year examinations, and honours the memory of Dr Robert Pettifer, who was a member of the department from 1972 until 2007.

Pictured (L-R): Mary Pettifer, Max Sketcher, Candice Pettifer, Mark Newton



Keeping webpages up to date

If you are deleting any webpages or files and these will no longer be needed please can you ensure that you delete them and also click the 'Purge' button as well. This will completely delete the pages, as we currently have over 4500 deleted pages and 16,000 deleted files that are sitting within the website when they can be deleted.

Do you have a story that could be included in the next newsletter? Click [here](#) to let us know!

Upcoming Dates

Anyone can add an event to the Physics [calendar](#). If you have availability to help at one of the upcoming Offer Holder Open Days, [please let us know your availability](#).

Physics Offer Holder Open Day—Wednesday 21 January

Physics with Astrophysics Offer Holder Open Day—Wednesday 28 January

All courses Institutional Offer Holder Open Day—Wednesday 18 February

[XMaS Scientist Experience competition closes](#)—Friday 27th February

All course department Offer Holder Open Day—Wednesday 4 March

All courses Institutional Offer Holder Open Day—Saturday 14 March



University Branding

The brand team have now designed individual department logos, if you would like to request the logo, please contact physicsadmin@warwick.ac.uk with a description of what you intend to use it for so they can provide you with the correct version.

Please be reminded the brand team do have many templates on the [brand portal](#) that you can use such as PowerPoint presentations, event posters, Student thesis templates and more. Please check there before you begin to create anything yourself. We should always use the word-mark (pictured) as well as the Crest on material. You will need to log in to the portal using your Unumber@live.warwick.ac.uk

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Department of Physics

Public lectures delivered at the Royal Institution

In November and December last year, both Rachel Edwards and Ally Caldecote were invited to deliver public lectures at the Royal Institution (RI). Rachel was invited by the RI team to host two lectures in November, one aimed at families titled 'How to survive in a cartoon universe' and the evening talk looking at the new ways scientists and engineers are going beyond traditional ultrasound. [Find out more about Rachel's talk.](#)



In December, Ally delivered a family lecture to a sold out lecture theatre titled 'There's no Business like Snow Business' where she took the audience on a journey of exploring the frozen world of snow and ice. [Find out more about Ally's talk.](#)

Equality, Diversity and Inclusion Feedback

Everyone at the University of Warwick, whether studying, working, or visiting, has the right to feel safe. If you would like to provide constructive feedback on Equality, Diversity and Inclusion initiatives in the department please do so via our [EDI feedback form](#).

You can also read the [Department of Physics Code of Conduct](#) which should be adhered to by everyone.

Do you have a story that could be included in the next newsletter? Click [here](#) to let us know!

Win a £60 Voucher by Travelling Sustainably with Warwick Green Rewards

Do you take the bus, walk, or cycle to campus? From 6th October you can turn your daily commute into Green Points with the Warwick Green Rewards Journey Challenge. Log every journey whether you walk, cycle, use public transport, drive an electric vehicle, or share a car and climb the leaderboard for a chance to win a voucher. The challenge runs until 6th November. [Join Warwick Green Rewards today!](#)

Future Leaders Fellowship (FLF) Scheme

Applications for Round 11 of the Future Leaders Fellowship (FLF) Scheme open on 2 February 2026. The Physics Department may nominate up to two applicants for internal selection. **The internal deadline is 20 February 2026 at 5:00 pm GMT.** Please check with your cluster as soon as possible for any earlier contact deadlines. Note that **the Astronomy cluster contact deadline is 30 January 2026.**

Applicants must have a **Physics Department staff mentor** who has agreed to the role. [All applicants are required to submit an Expression of Interest \(EOI\) via the RC online portal, using the mandatory template provided.](#)

Applications should be written for a non-expert audience, clearly setting out the big picture, the impact of the proposed work, and how the FLF would enable a step change in both research and career development. [UKRI's FLF webinar for academics](#) (last updated for Round 8) remains a useful guide. It highlights that more established candidates have become less competitive, so it is important to emphasise how the FLF will help cement academic leadership and independence.

The FLF scheme strongly encourages applications from a diverse range of researchers and offers flexibility to support varied personal circumstances, including career breaks, part-time or job-share working, and international applicants.

Internal selection will be carried out by a panel of Research Committee Cluster Representatives. Clusters are encouraged to nominate additional panel members to ensure diversity across career stage, research background, and personal characteristics. **Please send panel nominations to Heather Cegla and Steve Dixon by 19 February 2026.**

Mechanical Workshop team wins Outstanding Achievement Award

The Mechanical Workshop team has been awarded the Outstanding Achievement Team Award, recognising their exceptional contribution to the University's research and teaching community. The team of skilled technicians and engineers from Physics and Chemistry received several nominations, including individual and group recognition for delivering excellent work during a challenging period. These nominations highlight the team's resilience, adaptability, and dedication to supporting world-class research.

Over the past year, the Workshop Facility, which now brings together Mechanical, Glassblowing, and Electronics, has undergone significant change, most notably the integration of Physics and Chemistry to create a unified, collaborative service. These improvements continue to move the facility toward a more customer-focused and efficient approach.

Dr James Pring (Facility Manager) says: *"Congratulations to the Mechanical Workshop Team on this fantastic achievement! This well-deserved award reflects not only the incredible skills of the team but also their commitment to positive change and continuous improvement across all our workshops. I'm proud of what they've accomplished, and excited to see the facility adapt and grow as we move closer to STEM Connect."*

The awards, launched in 2023 by the [TechNet team](#) at Warwick, celebrate the fantastic work carried out by technical staff across the University. From enabling cutting-edge experiments to supporting innovative teaching, technicians play a vital role in academic excellence.

This award shines a spotlight on the Mechanical Workshop Team's dedication, creativity, and problem-solving talent. A huge congratulations to everyone involved. We're proud of their achievements and look forward to seeing even more success in the future.



Science of Music celebrations

Gavin Bell (Physics & IATL) and Oksana Trushkevych (Engineering & IATL, formerly Physics) gave a joint presentation in May at an interdisciplinary seminar in the Institute for Advanced Studies. Entitled “Music: Perception, Meaning & Metaphysics” [the seminar](#) focused on the philosophy and psychology of music perception. The research seminar was delivered to academics from University of Warwick and University of Birmingham. Ten years of teaching on the IATL module [Science of Music](#) prepared us for some thorough philosophical interrogation!



Gavin also composed a 5-minute musical piece to celebrate the Physics 60th anniversary, using many ideas from the Science of Music module on the themes of ‘symmetry’ and the number 60. The pre-recorded piece was premiered in the Physics Lecture Theatre on the day of the Physics 60th celebration in July and is available to [listen](#).

Reminder on behalf of the University Tax team

As the new academic year starts, we in the Tax Team are taking the opportunity to remind you when you need to think about the impact of customs on your activities.

The University incurs legal obligations whenever it receives goods (imports) from or sends goods (exports) to an overseas country – this applies to all goods, regardless of:

- How they are carried (i.e. including by post and in your baggage).
- How much if anything you pay for them (i.e. including samples and loans).
- Who you order them from (i.e. UK suppliers can ship from an overseas subsidiary or subcontractor, particularly multinationals).

Not meeting these obligations could result in unexpected costs to your budget, as well HMRC enquiries and civil penalties for the University. In particular you must note that imports that may qualify for duty/VAT relief (e.g. temporary imports and exports) never achieve this status automatically and action will be required.

What do you need to do?

If you:

- receive a customs clearance request from a transport company
- intend to send goods overseas (however no action is required for permanent, low value, non-licensable exports as defined in the ‘Simplified Exports’ section of [this page](#).
- Or intend to travel with goods

For more information please contact Duncan Brealey (Duncan.Brealey@warwick.ac.uk). You can also find more information in this [Frequently Asked Questions page](#)

Inclusive Language Guidance

Inclusive language can help to promote and embed equality, diversity and inclusion. We need to practice empathy and consider the impact of the words and phrases we use on the experience of others. Language is always evolving and changing meaning there is no definitive rules but understanding some key principles will help all of us adopt an inclusive approach on a day to day basis. [Find out more.](#)

Do you have a story that could be included in the next newsletter? Click [here](#) to let us know!

Stay safe and connected with SafeZone

SafeZone is a new University of Warwick safety app, designed to help staff and students feel safe, informed, and supported on campus. SafeZone connects you directly to campus safety and support teams in real time.

You can download the app for free from your phone's app store—just search for 'SafeZone'

How SafeZone works

Once you've downloaded the app, SafeZone gives you quick, direct access to help and key safety features – all at your fingertips.

Emergency help

Tap to instantly alert Community Safety if you're in danger or need urgent help.

Request first aid

Get medical assistance quickly, wherever you are on campus.

Check in

Let Community Safety know you're working alone or outside normal hours.

Receive safety alerts

Stay informed with real-time notifications during emergencies or incidents.

Get general assistance

Ask for non-urgent help or support from Community Safety.

Your location is private

Community Safety only sees your location when you request help or check in.

Wellbeing Support

- At Warwick, staff members can join the [Warwick Wellbeing Peer Support Group](#) which aims to create a safe and confidential space for members of staff who would like support with their wellbeing. The group is facilitated by professionally trained Lead Peer Support Staff and members can share lived experiences and knowledge in a safe and respectful environment.
- The [Employee Assistance Programme \(EAP\)](#) is a confidential support service designed to support staff (including GTA staff) with personal and professional problems that could be affecting your home life or work life, health and general wellbeing. This is available for you as well as immediate family members and offers services including life support, legal information, bereavement support, medical information and cognitive behavioural therapy (CBT).
- [Wisdom APP](#) provides confidential support with the option to contact via live chat, video call, helpline or request contact and offers tools such as weekly mood tracker, four week plans, mini health checks and breathing techniques.

[Find out what other support is available.](#)

The [Wellbeing team](#) offer [support to undergraduate and postgraduate students](#). Postgraduate students can also access support through the [Doctoral College](#).

New training opportunities

The Leadership and Management Development (LMD) team has been rebranded as Talent and Development. The team now offer courses and programmes for everyone and have been designing new learning opportunities to support your growth, whatever your role.

[Visit the pages to see what's on offer.](#)

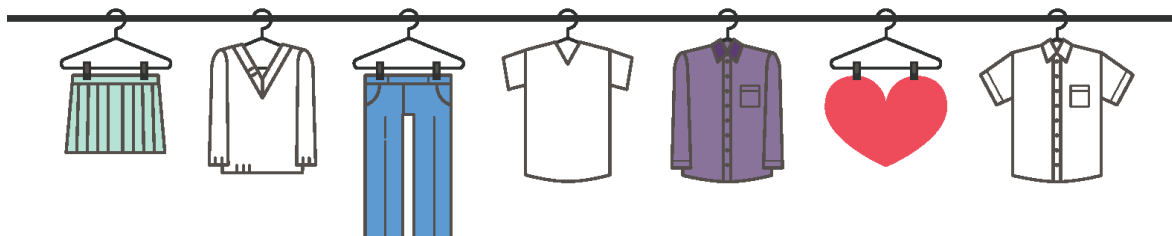
The Social Inclusion Team has created new micro modules which will be delivered to your inbox from inclusionlearning@warwick.ac.uk. The first one was titled 'Cultural Awareness' so look out for more arriving.

Do you have a story that could be included in the next newsletter? Click [here](#) to let us know!

Donate to the Workwear Wardrobe

Do you have unwanted clothes in your wardrobe that you don't wear for whatever reason? Or maybe something that is no longer your style, no longer fits, or you just don't love it anymore? We are seeking donations of pre-loved and unwanted workwear to stock our sustainable Workwear Wardrobe for our students.

[Find out where you can donate and when.](#)



Department hosts first ever Orbyts conference for the University

A collaboration of physicists (led by Dr Marina Lafarga Magro and Yoshi Eschen) marked a milestone by holding the first ever Orbyts conference at the University of Warwick on 20th of June this year.

Orbyts partners scientific researchers with secondary schools (GCSE-level) giving students a chance to conduct research alongside experts in the field. The programme aims to address diversity issues within science and inspire the next generation of researchers through hands-on experience.

With Orbyts hubs at other universities, the Warwick team established a Warwick hub. To launch the programme, the team reached out to postgraduate researchers within the [Astronomy and Astrophysics group](#), gathering interest and supporting them in developing a research project tailored for school groups. The team members were partnered with four schools – two in Coventry, one in Nuneaton, and one in Austria.

Over a six month period, students participated in weekly sessions led by their allocated researchers. The sessions typically began with an introduction to the scientific background and research goals, followed by students diving into real life research.

Yoshi, a member of the organising team and PhD student in the Astronomy and Astrophysics Group says:

“I love doing outreach and thought Orbyts was a great way to reach students and get them engaged in science. The students got the opportunity to experience research themselves over half a year including some challenges and successes (just as in real life). Our aim was to work with schools with underrepresented groups and from the feedback we received, the programme seemed to have a positive impact on the students that took part. The teachers seemed really pleased with the engagement and enthusiasm and want to work with us again next year.”

The programme ended with an engaging conference showcase hosted in collaboration with the University of Leicester at the Department of Physics at the University of Warwick, where students presented their findings through oral and poster presentations. The conference welcomed over 30 students in person plus around 10 students online and featured keynote talks from our academics - Tim Pearce, Don Pollaco, Ally Caldecote (who also did a demonstration on the day) as well as Simona Nitti from the University of Leicester hub.

Looking ahead, the team hopes to reach more schools in the local community with future projects.



Do you have a story that could be included in the next newsletter? Click [here](#) to let us know!