

The Athena SWAN (Scientific Women's Academic Network) Charter was established in 2005 with the aim of *"Encouraging and recognising commitment to advancing gender equality"* within STEM subjects, i.e., science, technology, engineering, and mathematics. The Athena SWAN agenda has grown overtime to promote equality in general. Scan the QR code opposite for more background about Athena SWAN at Heriot-Watt, including guidance and resources.

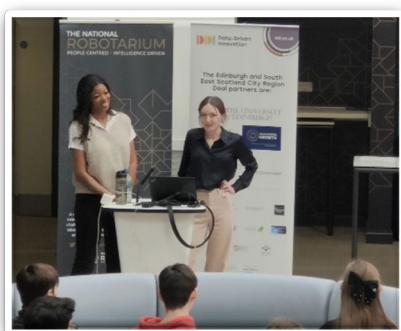


1. 24-Hour Hackathon Success – A Women@CS event in Edinburgh

We are excited to share that **Women@CS** successfully hosted its very first 24-hour hackathon (8-9 Feb), an event that pushed the boundaries of innovation and creativity! 🐛 Sponsored by **Diageo**, **MACS Athena Swan**, and **HWU STEM IN**, this hackathon presented students with a real-world challenge inspired by Diageo's Spirit of Progress 2030 initiative. Participants were tasked with using a synthetic dataset provided by Diageo to fast-track the company's journey to net-zero carbon emissions for scope 1 and scope 2, aligning with their mission to power global operations with 100% renewable energy by 2030.



A heartfelt thank you to **Diageo's Women in Technology team**, they gave inspiring talks and steadfast support throughout the event. We would also like to express our sincere appreciation to the academics, **Tessa Berg** and **Alistair McConnell**, whose mentorship was invaluable in shaping the planning and execution of the hackathon. A special thanks to **MACS Athena Swan** and **HWU STEM IN** for their support in this event.



Finally, the innovative ideas generated in just 24 hours by our participants were truly remarkable. We are so proud of everyone's dedication and creative solutions, and we can't wait for what's next!

Make contact with **Women@CS** via:

Catherine McCorkindale (cm2165@hw.ac.uk) or **Precious Onuora** (po2010@hw.ac.uk)
or add us on Instagram **@womenincs.hw**

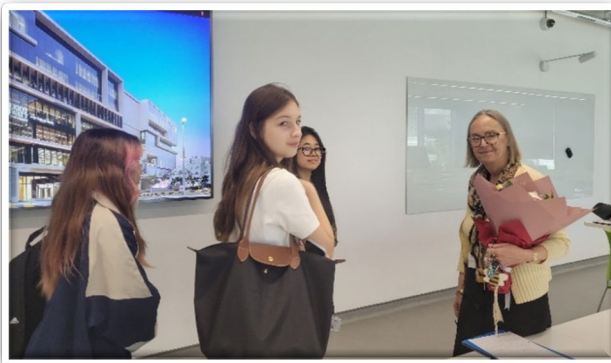


2. EPS and MACS – *International Day of Women & Girls in Science* - Community Building in Dubai



EPS celebrated the ***International Day of Women and Girls in Science*** on 12th February. The event was organized by the EDI coordinator, Dr. Manjula Nair (EPS). Prof Hind Zantout (MACS) delivered a motivational talk on the role of women in STEM in the UAE, and the wider representation of women in diverse fields like cybersecurity, aeronautics and automobile engineering, which traditionally, have been male dominated areas.

The event was well attended, with students and faculty from engineering disciplines participating. It was heartening to see a good representation of male students too highlighting the importance of fostering collaboration and equality in the scientific community.



3. Diving into Math with Emmy Noether

Diving into Math with Emmy Noether

A theatre performance by portraittheater Vienna in co-operation with Freie Universität Berlin

COMING TO MACS EDINBURGH IN MARCH:

Date and Venue TO BE CONFIRMED

www.portraittheater.net

Director: Sandra Schüddekopf

Actress: Anita Zieher

Scientific board:

Mechthild Koreuber & David E. Rowe

Duration: approx. 65 minutes

About the play: Emmy Noether (1882-1935) was one of the most influential mathematicians of the last century. Her works and teachings left a lasting mark on modern algebra, opening new avenues for a modern structural perspective in mathematics. Noether began her studies at a time when women were only beginning to break



down the barriers that prevented them from entering the doors of German universities. She eventually overcame even stronger resistance when she applied for the right to teach at a German university. It took her four years before she acquired that certification (Habilitation) in Göttingen on June 4, 1919, after submitting a thesis in which she solved one of the central problems in Einstein's general theory of relativity. To celebrate the centenary of this event and the career of a unique personality in the history of mathematics, the ensemble Portraittheater Vienna produced a biographical play, directed by Sandra Schüddekopf and starring Anita Zieher as Emmy. It opened on June 4, 2019 at the Freie Universität Berlin. Afterwards the play has been performed with great success at several different universities throughout Germany as well as the Theater Drachengasse in Vienna under the title "Mathematische Spaziergänge mit Emmy Noether". Based on historical documents and events, the script was written by Sandra Schüddekopf and Anita Zieher in cooperation with the historians Mechthild Koreuber and David E. Rowe. "Diving into Math with Emmy Noether," the English-language variant, will be available for performances in other European countries as of 2021, and will go on tour in North America during the spring of 2022. Financial support for the original production was provided by three universities in Berlin (Freie Universität, Humboldt-Universität, Technische Universität), and four other German universities (Erlangen-Nürnberg, Göttingen, Mainz, and Bielefeld).



This event is sponsored by the International Centre for Mathematical Sciences

4. Athena SWAN Summer Undergraduate Bursary Scheme 2025

The aim of the MACS Athena SWAN Summer Undergraduate Bursary Scheme is to improve gender equality across our disciplines, and more broadly address diversity, equality and inclusion (EDI) issues.

- *Any project that funds a student from an under-represented group meets this criteria.*
- *Likewise, a project topic that directly addresses EDI issues also meets this criteria.*

For Summer 2025 MACS **Dubai** will offer three bursaries and MACS **Edinburgh** will offer four bursaries. MACS **Malaysia** will also join the Bursary Scheme this summer and will offer one bursary. A Dubai bursary is worth 4500 AED while an Edinburgh bursary is worth 1000 GBP. The bursary in Malaysia will be worth 5500 MYR. Project ideas can come from students and/or academic staff from across the School. A project proposal, however, must be submitted by an academic member of staff that is willing to act as the project supervisor. You can access the application form via the QR Code or the following link:



Summer 2025

<https://www.hw.ac.uk/uk/schools/doc/macs/AthenaSwan/MACSAthenaSWANUGSummerBursaryScheme2025ApplicationForm.docx>

Note that the bursaries are not large. By way of guidance, 1000 GBP is roughly equivalent to what the university would pay a *Student Ambassador* for 100-hours of their time. The duration of a project is therefore relatively flexible, e.g., it could be condensed into a few weeks or spread out across the summer months. You will find guidance included with the application form.

Reports on last summer's Bursary Projects can be found in the October 2024 issue of the Newsletter (Issue 22), which can be found on the Student and Staff SharePoint pages (see item 5 below for links and QR Codes).

Applications should be sent to athena-macs@hw.ac.uk by NOON (BST) on Friday 4 April 2025 (week 12).





MACS Athena SWAN Newsletter

Issue 24

March 2025



5. Ada Lovelace Day 2025 – Event Ideas and Volunteers Needed!

Ada Lovelace Day takes place on the second Tuesday of October – although generally events are organized around this date. Last year Dubai held a **PechaKucha** focused event while in Edinburgh we ran a **Robot Demo** in the National Robotarium.


We are now looking for ideas and volunteers – from all MACS staff and students across all our Departments and Campuses – to be part of an organizing team for the **MACS 2025 Ada Lovelace Day (ALD'25)**.

If you are interested in getting involved and/or have a great idea for an event, then **please do get in touch by the end of March**, i.e., contact us via:

athena-macs@hw.ac.uk




6. Calling for Heroes!



Emmy Noether

Amalia Emmy Noether (23 March 1882 – 14 April 1935) was a German mathematician who made many important contributions to abstract algebra. She proved Noether's first and second theorems, which are fundamental in mathematical physics. She was described by Pavel Alexandrov, Albert Einstein, Jean Dieudonné, Hermann Weyl and Norbert Wiener as the most important woman in the history of mathematics. As one of the leading mathematicians of her time, she developed theories of rings, fields, and algebras. In physics, Noether's theorem explains the connection between symmetry and conservation laws.





Radia Perlman

Radia Joy Perlman (born December 18, 1951) is an American computer programmer and network engineer. She is a major figure in assembling the networks and technology to enable what we now know as the Internet. She is most famous for her invention of the Spanning Tree Protocol (STP), which is fundamental to the operation of network bridges, while working for Digital Equipment Corporation, thus earning her nickname "Mother of the Internet". Her innovations have made a huge impact on how networks self-organize and move data. She also made large contributions to many other areas of network design and standardization, for example, enabling today's link-state routing protocols, to be more robust, scalable, and easy to manage.






Ada Lovelace

Augusta Ada King, Countess of Lovelace (née Byron; 10 December 1815 – 27 November 1852) was an English mathematician and writer, chiefly known for her work on Charles Babbage's proposed mechanical general-purpose computer, the Analytical Engine. She was the first to recognise that the machine had applications beyond pure calculation.


Annie Easley

Annie Easley was an American computer scientist and accomplished mathematician who made critical contributions to NASA's rocket systems and energy technologies over her 34-year career. As a black female in America during the 1950s she faced heavy adversity throughout her career and was often underrepresented and disregarded. Despite these barriers, Easley demonstrated perseverance and determination to make a name for herself in a line of work dominated by males. She demonstrated exceptional skills in mathematics, data analysis, and code development across projects focused on alternative energy sources, improved power systems, and launch capabilities enabling space communication and exploration.

Dorothy Vaughan

Dorothy Jean Johnson Vaughan (September 20, 1910 – November 10, 2008) was an American mathematician and human computer who worked for the National Advisory Committee for Aeronautics (NACA), and NASA, at Langley Research Center in Hampton, Virginia. In 1949, she became acting supervisor of the West Area Computers, the first African-American women to receive a promotion and supervise a group of staff at the center.




Grace Hopper

Grace Brewster Hopper (née Murray; December 9, 1906 – January 1, 1992) was an American computer scientist, mathematician, and United States Navy rear admiral. One of the first programmers of the Harvard Mark I computer, she was a pioneer of computer programming. Hopper was the first to devise the theory of machine-independent programming languages, and the FLOW-MATIC programming language she created using this theory was later extended by others to create COBOL, an early high-level programming language still in use today.



Please send your suggestions to athena-macs@hw.ac.uk and help celebrate diversity in Computing and/or Mathematics via the 'Big Display Screens' within MACS (Edinburgh). Alternatively, if you know of a video clip (with subtitles) that celebrates diversity in Computing and/or Mathematics then we would also be keen to hear from you.

If you have suggestions or questions related to Athena SWAN, or an event that you would like to advertise, then please send them to us via athena-macs@hw.ac.uk. In addition, if you would like to be part of the MACS Athena SWAN Team (a.k.a. the Self-Assessment Team (SAT)) then please do get in touch.

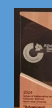


*Audrey Repetti and Andrew Ireland
(MACS Athena Swan Coordinators)*



MACS Athena SWAN Coordinators: Audrey Repetti (a.repetti@hw.ac.uk) and Andrew Ireland (a.ireland@hw.ac.uk)

MACS Equality Charter website: <https://www.hw.ac.uk/schools/mathematical-computer-sciences/about/athena-swan.htm>





Leadership & Allyship: Accelerating Action for Gender Equality



An International Women's Day event & lunch

Join us for a keynote talk by
Prof Lesley Yellowlees (former
President Royal Society of
Chemistry), a panel discussion
with the School Executive
Deans, and a buffet lunch!



SCAN ME

Friday
7 March
10am-1pm

Scott Suite
EBS
Heriot-Watt
Edinburgh campus

