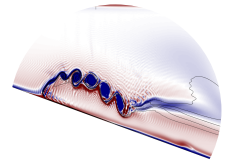


SAMUEL HARTHARN-EVANS

PhD Researcher Applied Mathematics

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RESEARCH INTERESTS

Understanding how the cryosphere and oceans interact

TOP ACHIEVEMENTS

🏆 **Dr John Robert Jones Award 2018**
£600 prizes awarded annually to six students across Bangor University whose academic performance is judged most meritorious

🎓 **UniBrass 2019**
Organising the 2019 UK university brass band championships, involving over 750 performers in a multifaceted event

💻 **Lockdown Work**
Adapting to challenges of lockdown in 2020, learning to use and deploy the SPINS numerical model to continue the project

IT & COMPUTING

Microsoft Office ● ● ● ● ●

MATLAB ● ● ● ● ●

LaTeX ● ● ● ● ●

SLURM / HPC ● ● ● ● ●

DigiFlow: Advanced image processing for fluid mechanics ● ● ● ● ●

Make ● ● ● ● ●

Python ● ● ● ● ●

RESPONSIBILITIES

Treasurer | UK Polar Network

📅 **September 2021 – Present**

- Responsible for managing the finances of the UKPN, to support UK Polar ECRs.

EDUCATION

PhD Applied Mathematics

📍 **Newcastle University**

📅 Sept 2019 – Ongoing

Internal Solitary Waves in Ice Covered Waters - Main Supervisor: Dr. Magda Carr

- NERC ONE Planet DTP Funded (grant number [NE/S007512/1])
- Laboratory investigation into Internal Solitary Waves in Ice-Covered Waters, involving flow visualisation, use of Particle Image Velocimetry, practical skills of developing and carrying out experiments.
- Initial sub-project submitted to Journal of Fluid Mechanics, using combined laboratory and numerical approach. Involved setting up model, using the university High Performance Computer, and processing, analysis and presentation of model and laboratory data.

MSc Physical Oceanography - First

📍 **Bangor University**

📅 Sept 2018 – Sept 2019

Thesis: How does Siberian river outflow impact the onset and duration of sea ice formation and melt - Supervisor: Dr. Yueng-Djern Lenn

- Modules including: Practical Oceanography, Geophysical Fluid Dynamics, Climate and Climate Change
- Ship-based field project: Designing, organising, collecting and analysing physical oceanographic data from Ship-Based Fieldwork as part of a group project.
- Nautilus Scholarship - Award of £6250 to support four MSc students in Ocean Sciences awarded the highest grades for their BSc

BSc (Hons) Marine Biology & Oceanography - First

📍 **Bangor University**

📅 Sept 2015 – Sept 2018

Dissertation: What would the global climate implications of turning off the rivers flowing into the Arctic Ocean be? Supervisor: Prof. Tom Rippeth

- Modules including: Tides, Waves and Sampling; Prince Madog Cruise; Estuary and Shelf Sea Processes; Coastal Processes Field Study
- Dr John Robert Jones Award 2018- £600 prizes awarded annually to six students across Bangor University whose academic performance is judged most meritorious
- Darbyshire Prize 2018- £60 prize awarded to the best final year student studying for a degree wholly within the School of Ocean Sciences

- Application and sourcing of grant income to fund the organisation's work
- Strategic budgeting to enable project groups to plan their activities for the year

Secretary | UniBrass Foundation

📍 **Feb 2019 – Present**

- Responsible for producing agendas, minutes and trustees annual reports, and other charity administration
- Involved in running outreach and marketing projects
- Taking on full legal responsibilities of Charity Trustee

UniBrass Organising Committee Chair

📍 **Feb 2018 – Feb 2019**

- Ultimately responsible for delivery of a national project with budget of £20,000, involving many varied external organisations.
- Leading the UniBrass Organising Committee of other students
- Liaising with senior staff from the university, arts centre, and other external organisations, negotiating to make sure that all involved organisations benefitted from the event.

Youth4Ocean Founding Member

📍 **April – December 2020**

- Developing initial working processes for the forum to promote Ocean Literacy in Europe
- Virtually forming working relationships, and remotely working with other forum members from across Europe (and overseas territories) from diverse backgrounds.

ONE Planet DTP Cohort 1 Rep

📍 **Jan 2020 – Present**

- Responsible for providing feedback from the cohort to the DTP Directors, as well as organising social activities, and raising EDI concerns.
- Organising and chairing regular student forum meetings
- Responsible for launching and running student-led DTP twitter account to promote the DTP, and the work of PhD researchers active in it.

ACADEMIC SERVICE

Peer review

Assisted review of articles submitted to Journal of Fluid Mechanics, Communications

Wirral Grammar School for Boys

📅 2008 – 2015

Bebington, Wirral

- A Levels - Biology A*, Mathematics A*, Further Mathematics A, Geography A, General Studies A
- GCSE's – 11 A*-B including Mathematics A*, English Language A

PAST EMPLOYMENT

Open Day Assistant

📍 **Bangor University**

📅 Sept 2017 – August 2019

- Giving guided coach tours of the city, requiring good oral presentation under strict time pressure
- Excellence in this job resulted in further outreach work, including school visits, and Taste of Higher Education Summer Schools 2018 & 2019.
- Showing the university accommodation, providing informative and reliable information to parents and prospective students.

Bar & Front of House Staff

📍 **Chester Racecourse**

📅 June 2017 – August 2019

- Customer service under high pressure for long periods of time
- Working unsupervised in unknown situations, often a new area or type of work in a shift.
- Led to further work at Creamfields festival, involving long, fast-paced shifts over a single weekend.

PRESENTATIONS & CONFERENCES

Newcastle University School of Mathematics, Statistics and Physics | Applied Internal Seminar

📅 13th October 2021

Stratification effects on Shoaling Internal Solitary Waves

Leeds Fluids CDT Conference | Invited Oral Presentation

📅 17th June 2021

Stratification effects on Shoaling Internal Solitary Waves

Our Planet: ONE Planet Student Research Expo | Poster & Lightning Talk

📅 10th June 2021

Stratification effects on Shoaling Internal Solitary Waves

ONE Planet Student Seminar | Oral Presentation

📅 19th May 2021

Stratification effects on Shoaling Internal Solitary Waves

Earth & Environment, Geophysical Research Letters, and Physical Review Fluids.

Supervision

Assisting supervision of MMath Student on a project investigating shoaling Internal Solitary Waves over rough slopes using a numerical model.

Conference Organisation

Organised the 2021 ONE Planet DTP virtual Conference "Our Planet: ONE Planet Research Expo"

Outreach

Part of the team responsible for organisation and delivery of the ONE Planet Outreach scheme, which has delivered events including on-campus school visits, and a science fair at the Hancock Museum.

Demonstrating

PGR Demonstrator for first year introductory python class

Polar Early Career Conference | Oral Presentation

📅 5th May 2021

Riverine drivers of Sea Ice Freezup in the Kara Sea
Chaired employability on "Staying in Academia"

vEGU 2021 | vPICO Poster & Lightning Talk

📅 26th April 2021

Stratification effects on shoaling Internal Solitary Waves
Abstract

Awarded virtual Outstanding Student Poster Presentation

Virtual Physical Oceanography and Shelf Sea Seminar Series | Oral Presentation

📅 4th November 2020

Shoaling internal solitary waves: Is stratification type important?

SAGe Faculty Conference | Poster

📍 **Newcastle University**

📅 1st-5th June 2020

Is the behaviour of internal solitary waves propagating up-slope dependent on stratification? **Awarded runner up Best Poster**
