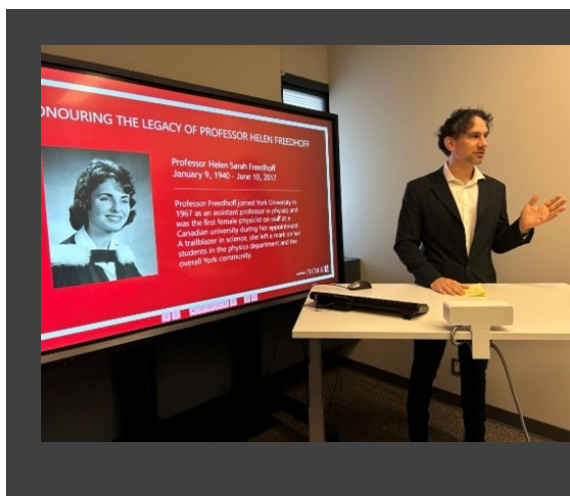


Dean's Round-up: January 2024

FACULTY HIGHLIGHTS



The Faculty announced its new [Helen Freedhoff Memorial Fund](#), which will support student mentorship and research at the undergraduate level in the Department of Physics & Astronomy. The fund, which honours the legacy of the late York Professor Helen Freedhoff, was established thanks to a generous donation by York Science alumni **Itay** and **Mina Yavin**.

CONGRATULATIONS

The Department of Mathematics & Statistics ran its second Annual Bernoulli Challenge, a contest based on York's first-year mathematics curriculum and consisting of a sequence of questions where students are eliminated once they answer two questions incorrectly. The winners were:

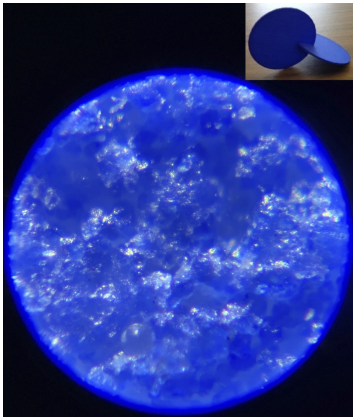
- 1st place - **Adam Cherti** (Physics)
- 2nd place - **Joshua Levine** (Statistics)
- 3rd place - **Lok Choy** (Pure Math)
- 4th place - **Daniel Mychakov** (Statistics)

Christine Le (Chemistry) was among the [Thieme Journals Awardees](#) for 2024; she was also the only Canadian researcher to be included in this list. This award is presented every year to up-and-coming researchers worldwide who are in the early stages of their

independent academic career as assistant or junior professors. Awardees are selected by the editorial board members of the journals *SYNTHESIS*, *SYNLETT*, and *SYNFACTS*.

MORE NEWS

The **Allan I. Carswell Observatory** began a partnership with the Kimel Family Centre for Brain Health and Wellness at Baycrest. The Observatory provides the Kimel Centre with unique experiences for its members, who now have the opportunity to virtually observe the night sky, learn about variable stars, and explore the galaxy, all from the comfort of their homes.



A photo taken by **Amenda Chow** (Mathematics & Statistics) was featured in the [2023 Basic Research Art of Science Showcase](#), hosted by the Air Force Research Laboratory (USA). Her photo is a magnified perspective of a 3D-printed object and was captured in York's Experimental Math Space, which she leads.

Elizabeth Clare (Biology) presented a public lecture titled "[Measuring Biodiversity by Harnessing the Wind](#)" for the Saskatoon Nature Society.

Elaina Hyde (Physics & Astronomy) presented invited talks about the Allan I. Carswell Observatory at the Toronto Centre of the Royal Astronomical Society of Canada and at the North York Astronomical Association.

Coordinated by **Neal Madras** (Mathematics & Statistics), the Department of Mathematics & Statistics and Bethune College hosted the annual Winter Math Camp of the Canadian Mathematical Society (CMS) for the 25th time at York University. On Jan 2-7, 18 outstanding Canadian high school students and six trainers stayed on campus for the camp, the purpose of which is to provide students with additional expertise and practice for international math competitions. The students were identified by the CMS as top prospects for Canada's team at the 2024 International Mathematical Olympiad in Bath, England, and at the European Girls' Mathematical Olympiad in Tskaltubo, Georgia.

Laurence Packer (Biology) was co-editor of a volume of [Zootaxa](#) that is a festschrift for the late bee scientist Fernando Silveira. In this volume, he also published the paper "Three new species of *Microsphecodes* s.str. (Hymenoptera: Halictidae) with an updated key to species of the subgenus" with his former technician **Liam Graham**.

Wendy Taylor (Physics & Astronomy) wrote an article titled "Magnetic monopoles were art thou?" in the [CERN COURIER](#) magazine. The article summarized research published by

Taylor and her recent PhD graduates **Ana Maria Rodriguez Vera** and **Wen-Yi Song**, [Search for magnetic monopoles and stable particles with high electric charges in \$\sqrt{s}=13\$ TeV pp collisions with the ATLAS detector](#), in the *Journal of High Energy Physics*.

Jianhong Wu (Mathematics & Statistics) was highlighted in a [Professional Feature](#) in *DSWeb* (The Dynamical Systems Web) *Magazine*.

RESEARCH HIGHLIGHTS

Postdoc **Martin Grunhill** (Mathematics & Statistics), Julien Arino, PhD student **Zachary McCarthy** (Mathematics & Statistics), Nicola Luigi Bragazzi, Laurent Coudeville, Edward W. Thommes, Amine Amiche, Abbas Ghasemi, Lydia Bourouiba, **Mohammadali Tofighi** (Dahdaleh), **Ali Asgary** (Liberal Arts & Professional Studies), Research Fellow **Mortaza Baky-Haskuee** (Mathematics & Statistics), and **Jianhong Wu** (Mathematics & Statistics) [Modelling disease mitigation at mass gatherings: A case study of COVID-19 at the 2022 FIFA World Cup](#) in *PLOS Computational Biology*. **READ THE [PRESS RELEASE FROM YORK UNIVERSITY](#)**.

Mikhail Kim, PhD student **Coral Hillel** (Physics & Astronomy), Kayrel Edwards, Tristan H. Borchers, **Ozzy Mermut** (Physics & Astronomy), **William J. Pietro** (Chemistry), and **Christopher J. Barrett** (Adjunct, Physics & Astronomy) published [Azo dye polyelectrolyte multilayer films reversibly re-soluble with visible light](#) in *Frontiers in Materials*.

Danial Naderian, Roohollah Noori, Essam Heggy, Sayed M. Bateni, Rabin Bhattarai, Ahmad Nohegar, and **Sapna Sharma** (Biology) published [A water quality database for global lakes](#) in *Resources, Conservation and Recycling*.

Wesley G.D.P. Silva, Tamanna Poonia and **Jennifer van Wijngaarden** (Chemistry) published [Exploring the conformational landscape, hydrogen bonding, and internal dynamics in the diallyl ether and diallyl sulfide monohydrates](#) in *The Journal of Chemical Physics*.

MSc student **Thomas Wu** (Environment & Urban Change), MSc student **Thi Nhi Nguyen** (Biology), former Research Assistant and MSc student **Mohammad Arshad Imrit** (Biology), **Jude Kong** (Mathematics & Statistics), and **Sapna Sharma** (Biology) published [Increasing fish biodiversity in high elevation Albertan lakes in response to global environmental change over the past 50 years](#) in *Frontiers in Ecology and Evolution*.

For a full list of publications from the Faculty of Science, see our [website](#).

MEDIA

Elizabeth Clare (Biology) was a guest on the [Solve for X](#) podcast by MaRS talking about new technologies for large scale biomonitoring. She was also quoted in a story by [NPR](#) covering new research (not involving Clare) about using spiderwebs to monitor biodiversity.

Elaina Hyde (Physics & Astronomy) spoke with numerous media outlets about the upcoming solar eclipse on April 8, including [CTV News](#), *The Canadian Press*, which resulted in media articles published by [CBC News](#) and the [Toronto Star](#) and [Ottawa Citizen](#), and *AM900 CHML*. and *AM640*. She also spoke to [Metroland](#) about the wolf moon and Jupiter being close in the sky in January, and *AM900 CHML* about the SLIM Lander on the moon.

Sarah Rugheimer (Physics & Astronomy) spoke to *AM640* about NASA's Spacecraft malfunctioning on its way to the moon.

EVENTS

Feb 29: [Drop-In Help Session on IT Navigation](#), 12-1 pm, on Zoom.

Mar 5: [EdSci Book Club – Grading for Growth](#), 12-1 pm, on Zoom.
