



A newsletter celebrating student success around PHAS!

Publications

from PHAS students who were first or second author

Owen Paetkau, "Index matching computerized tomography." *American Journal of Physics*, 2021

Kyle Reiter, "Statistics of large impulsive magnetic events in the auroral zone." *Journal of Space Weather and Space Climate* 11, Aug 2021

Joseph Madamesila, "Investigating diffusion patterns of brain metastases pre-and post-stereotactic radiosurgery: a feasibility study." *Biomedical Physics & Engineering Express*, Aug 2021

Koorosh Esteki, "Tuning the electro-optical properties of nanowire networks." *Nanoscale*, Sep 2021

Anustup Das, "Demonstration of hybrid high-Q hexagonal boron nitride microresonators." *ACS Photonics*, Sep 2021

Prasoon Kumar Shandilya, "Optomechanical interface between telecom photons and spin quantum memory", *Nature Physics*, Oct 2021

Davor Curic, "Deconstructing scale-free neuronal avalanches: behavioral transitions and neuronal response." *Journal of Physics: Complexity*, Nov 2021

Kenneth Sharman, "Quantum repeaters based on individual electron spins and nuclear-spin-ensemble memories in quantum dots." *Quantum* 5, Nov 2021

Amy Frederick, "Performance of a knowledge-based planning model for optimizing intensity-modulated radiotherapy plans for partial breast irradiation", *Journal of Applied Clinical Medical Physics*, Dec 2021

Pictures, from left to right: Long-exposure image shows a trail of a group of SpaceX's Starlink satellites passing over Uruguay (IMAGE: MARIANA SUAREZ/AFP VIA GETTY IMAGES) from the news article: SpaceX's satellite megaconstellations are astrocolonialism, Indigenous advocates say (Jennifer Howse); Picture from "University of Calgary physicists develop novel approach to building a 'quantum internet'" on UCalgary News.

Defences and Candidacies

Parisa Zarkeshian, PhD Defence

Reihaneh Ghaffari, PhD Defence

Yuyang Wang, MSc Defence

Blaine McLaughlin, MSc Defence

Kim Owen, MSc Defence

Hadi Zadeh-Haghighi, PhD Candidacy

Pengcheng Liao, MSc Defense

Omid Khajehdehi, PhD Candidacy

Anustup Das, MSc Defence

Sumit Goswami, PhD Defence

Becky Booth, MSc Defence

Upcoming Events

7th Annual PHAS Symposium- Feb 2022

The *PHAS Symposium* is a day-long event organized by **PHAS DGA** for students to present their research and engage in scientific conversations with their peers. This is an invaluable opportunity for graduate students to improve their communication skills and be involved in an initiative to enhance the academic experience of their colleagues. This event greatly enhances a sense of community within our department. From its launch in late 2015, the PHAS Symposium has been growing with respect to its impact and attendance. We have been incorporating new ideas to help encourage students to participate in the symposium as well as improve their experience, such as organizing keynote speeches by experts from different career avenues. Please check our [webpage](#) for more information.

Peer Beyond Graduate Research Symposium- Feb 23 to 25, 2022



The banner features a stylized human head profile on the left, composed of various colored squares (blue, green, yellow, orange, red, purple). To the right of the head, the text reads: **PEER BEYOND** in large orange letters, followed by **GRADUATE RESEARCH CONFERENCE** in smaller yellow letters. Further right, the text says: **UCalgary's Multi-disciplinary Graduate Research Conference** in dark blue, with the tagline *Impact starts here.* below it. The dates **February 23 to 25, 2022** and the location **Live on Gather.Town** are listed in orange. At the bottom right, the registration link **Register here: gsa.ucalgary.ca/peerbeyond** is provided in dark blue.

Please let the DGA know about your and your group's future successes!