

Contact:

Dr. Can-Ming Hu

Phone:

1-204 - 474 6189

Fax:

1-204 - 474 7622

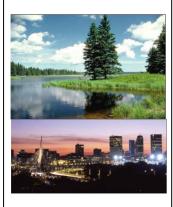
e-mail:

hu@physics.umanitoba.ca

Mail:

Department of Physics and Astronomy University of Manitoba, Winnipeg, Manitoba, Canada R3T 2N2

or visit our webpage at: http://www.physics.umanitoba.ca/~hu/





Undergraduate research positions

(Honours Thesis Research via the courses PHYS4676, PHYS4678, and Summer Research Jobs)

are available in the Dynamic Spintronics Group of the Department of Physics and Astronomy at University of Manitoba to pursue interdisciplinary research. The group is performing world-leading research in the emerging field of cavity magnonics. The main goal of our summer student projects is to achieve broad understanding of light-matter interactions with relevance to innovating electronics, photonics, spintronics and microwave applications.

Current research projects include:

- (1) **Coupled Oscillators**: Learn the basic physics of coherent and dissipative couplings;
- (2) **Cavity Magnonics**: Learn the frontier physics of magnon-photon couplings;
- (3) **Wave Physics**: Learn the general physics of light-matter interactions;
- (4) **RF Application**: Development of novel microwave devices for biological, medical and industrial applications.

The undergraduate students will be teamed up with our graduate students and research associates, receiving hands-on training in frontier condensed matter physics research. Each specific project will be planned according to the student's interest and talent. Previous experience in microfabrication, materials science, RF and microwave technology will be helpful but not required. A keen interest in interdisciplinary research and a strong commitment to academic excellence is essential.



Some of our brightest undergraduate students:



Michael Harder (2010) (1st Prize Winner of NSERC Poster Competition)



Sandeep Kaur (2014) (2nd Prize Winner of NSERC & MIM Poster Competitions)



Bentley Turner (2021, 2024) (1st Prize Winner of MIM Poster Competitions)



YOU!