## PHYSICS AND ATMOSPHERIC SCIENCE



### Master of Science (MSc) Doctor of Philosophy (PhD)

The Department prides itself on providing its students with cutting-edge, world class research opportunities in a collegial environment. Students have access to a wide range of state-of-the-art equipment, including materials growth and characterization facilities, high power computer clusters, atmospheric observational facilities and medical imaging facilities. Their friendly faculty and staff provide graduate students with an environment where ideas and research facilities are shared between groups. They offer physics, atmospheric science and graduate seminars with a wide variety of speakers to compliment the total learning experience at the school.



# Why study Physics and Atmospheric Science at Dalhousie?

#### **RESEARCH STRENGTHS**

The department has research strengths in Applied Physics, Atmospheric Science, Astrophysics, Medical Physics, Biophysics, Condensed Matter Physics theory and experiment, and sub-atomic physics. Professors attract over \$5M in funding per year to support these programs. Per capita, our department ranks among the leaders in this category for the U15 group of universities, which attract 80% of the research funding allocated in Canada. This funding is a reflection of the fact that many of our faculty are world leaders in their field. We also have a particular strength in nurturing graduate students to achieve their career goals (see below).

#### **POTENTIAL CAREERS**

Statistics from 2008-2014 reveal that 33 of 37 MSc students took up placement in a doctoral program or employment related to Physics, Atmospheric Science or Medical Physics. Almost six out of ten (57%) MSc graduates move on to become PhD candidates and 30% are employed in the industrial sector or a government lab. During the same period, 26 of 27 (96%) PhD graduates took up placement in careers related to their training. Most PhD graduates became research scientists in industry (37%), post-doctoral fellows -PDF (26%) or faculty (15%) at universities around the world.

#### ADMISSION REQUIREMENTS

a. Master's Degree Program

Candidates must satisfy the general requirements for admission to the Faculty of Graduate Studies with the following conditions: For entry into a Master's program with a thesis requirement, candidates must hold a Bachelor's Degree with an honours or the equivalent of honours if there is evidence of independent research capacity (such as a research project as part of a class). In those cases where a candidate has a three (3)-year degree and a four (4)-year degree honours program was not available to them, first-class candidates will be considered for admission to a two-year program. b. Doctoral Degree program

The criteria for admission to Doctoral programs are more rigorous than for Master's programs. The successful completion of a Master's degree does not guarantee admission to a PhD program. Typically a PhD thesis must represent an original contribution which advances the field of learning in the subject. It must be a significant piece of research and only those with a demonstrated ability to perform research at an advanced level will be considered for admission.

#### LENGTH OF PROGRAM

MSc: typical time to complete is 2 years PhD: typical time to complete is 4-6 years

#### APPLICATION DEADLINE

We accept applications on an ongoing basis. However, for September entrance the deadline is June 1st for domestic and April 1st for international students. For January admission, the deadline is November 1st for domestic students and August 1st for international students.

#### **CONTACT INFORMATION**

902.494.6835 gradc@fizz.phys.dal.ca dal.ca/physics

#### **FACULTY OF GRAD STUDIES**

Dalhousie University | PO Box 15000 | Halifax Nova Scotia | Canada B3H 4R2 | dal.ca/grad Tel: 902.494.2485 | graduate.studies@dal.ca | 🖸 @dalgradstudies | f /dalgradstudies | 🙋 @dalhousie\_university