



Physics Research at Carleton University

Medical Physics...

... the application of physics to problems involving human health. Carleton University specializes in

- **Imaging:** MRI, PET, X Ray, Optical, Nuclear Medicine
- **Cancer therapy:** Radiation Dosimetry and Radiotherapy
- **Medical biophysics:** Radiation Biology

The program is offered in collaboration with medical physicists from The Ottawa Hospital Cancer Centre, the National Research Council, Health Canada, The University of Ottawa Heart Institute, and The Ottawa Hospital. The Ottawa Medical Physics Institute provides a focal link for professional medical physicists in Ottawa and their graduate students.

The PhD program is accredited by CAMPEP.

Particle Physics...

... the study of the fundamental nature of matter and the basic forces that shape our universe.

- **Theory:** phenomenology of elementary particles, hadron physics, string theory
- **Experiment:** detector instrumentation and design, physics simulation, experimental operations and data analysis on the following projects:

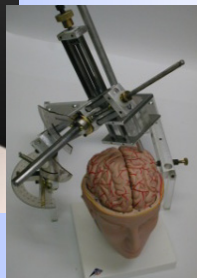
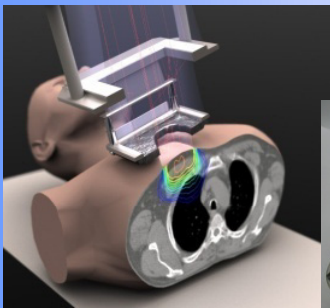
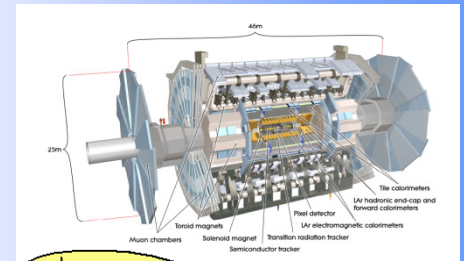
- ATLAS at CERN in Geneva, Switzerland
- DEAP at SNOLAB in Sudbury, ON
- EXO at SNOLAB in Sudbury, ON
- International Linear Collider (ILC)
- Muon tomography for security imaging

Carleton is a Member University of TRIUMF.



Carleton
UNIVERSITY

Canada's Capital University



Carleton-based faculty

Medical Physics:

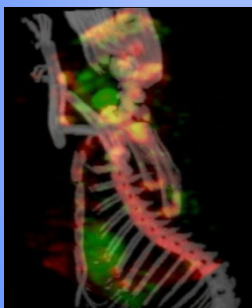
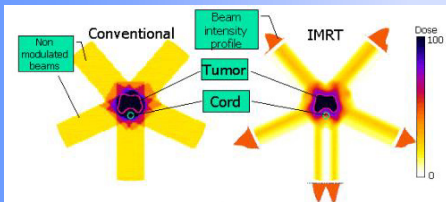
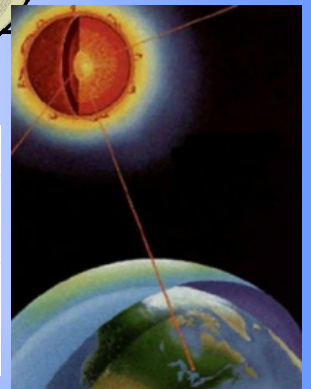
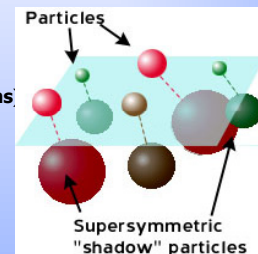
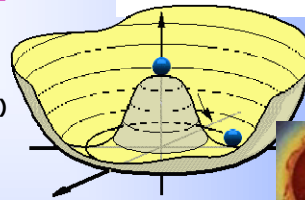
- E. Heath (radiotherapy, Monte Carlo)
- P.C. Johns (x-ray imaging)
- S. Murugkar (biophotonics)
- D.W.O. Rogers (radiotherapy, Monte Carlo)
- R. Thomson (radiotherapy, Monte Carlo)
- T. Xu (image guided therapy)

Theoretical Particle Physics:

- B. Campbell (phenomenology, strings)
- S. Godfrey (phenomenology)
- T. Grégoire (phenomenology)
- P. Kalyniak (phenomenology)
- H. Logan (phenomenology)

Experimental Particle Physics:

- J. Armitage (security screening applications)
- A. Bellerive (ILC, ATLAS)
- M. Dixit (ILC, EXO)
- K. Graham (EXO, DEAP)
- T. Koffas (ATLAS)
- G. Oakham (ATLAS)
- D. Sinclair (EXO)
- M. Vincter (ATLAS)



Graduate degree information...

physics.carleton.ca

For more information about M.Sc. or Ph.D. studies at the Physics Department of Carleton University:

Grad program: physics.carleton.ca/prospective-graduate-students
Email: grad_supervisor@physics.carleton.ca

To apply online: graduate.carleton.ca/apply-online/

