



PHYSICS AND ASTRONOMY COLLOQUIUM

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McGill University

“Physics in Radiation Medicine: Research, Training and Clinical Role in the Next Decade”

Abstract

The traditional role of medical physics in cancer radiotherapy is to provide clinical service to ensure that radiation therapy can be accurately and safely delivered. The medical physics research endeavour, over the years, has been involved in the development of procedures and devices to enable that goal. In recent times, cancer, as a complex process, is increasingly being addressed and researched by quantitative scientists in collaboration with basic researchers and clinicians. There is a mounting interest of medical physicists in approaches that help make cancer treatments more personalized through multimodality image analysis and radiomics techniques. On the opposite side, ongoing quantitative efforts aim at better understanding the detailed radiation action to cells and tissues. Using research performed at McGill, this presentation will provide an overview of this evolution, the current and future role of medical physics research and the impact it has on clinical service and medical physics training programs.

Wednesday, November 16, 2016

3:00 p.m.

Elliott Building

Room 167