## **MPU SEMINAR SERIES: 2016-2017**

## **Fall 2016**

- **September 02 : Charles-Antoine Collins-Fekete** (CHUQ / Univ Laval / Harvard-MGH)

  From Fermi diffusion equation to hadron imaging: Applications to proton therapy
- **September 09 : Kevin Alexander** (Queen's University, Kingston, Ontario) *Clinical implementation of film & gel dosimetry*
- **September 18 : Avishek Chatterjee** (University of Geneva, Geneva, Switzerland)

  Searching for new physics using the ATLAS detector at the Large Hadron Collider
- October 21: Richard Richardson (Canadian Nuclear Laboratories, Deep River, ON)

  Mitochondrial stress controls the radiosensitivity of the oxygen effect:

  Implications for radiotherapy
- **October 28 : Angelica Perez-Andujar** (University of California-San Francisco, San Francisco, CA) *Advances in stereotactic treatments of multiple brain metastases*
- November 04 : Louis-Martin Rousseau & Mehdi Mahnam (École Polytechnique, Montréal, QC)

  A column-and-row generation heuristic to Volumetric-modulated Arc Therapy (VMAT)

  treatment planning problem
- **November 25 : Juliette Selb** (Biomedical Imaging, Massachusetts General Hospital, Boston, MA)

  Diffuse optical imaging of the brain: Applications to functional imaging and clinical neuro-monitoring
- **December 16: James Coates** (Oncology, University of Oxford, Oxford, England)

  The anti-malarial drug atovaquone alleviates tumor hypoxia and improves radiosensitivity "in vivo"
- **December 16 : Ivan Buzurovic** (Harvard Medical School, Boston, MA) Redefinition of treatment planning in brachytherapy procedures

## Winter 2017

- **February 03 : Paul François** (Physics, McGill University, Montreal, QC) *Immune recognition, phenotypic spandrel and machine learning*
- **March 10 : Phil Gold** (Medicine, Montreal General Hospital, Montreal, QC) *Cancer immunology: 'Of mice and men'''*
- March 31: Tom Purdie (Ontario Institute of Technology, Oshawa, ON)

  Automated treatment planning and quality assurance in radiotherapy
- **April 07 : Kari Tanderup** (Aarhus University Hospital, Aarhus, Denmark)

  The EMBRACE studies in cervix cancer: A model for future multidimensional studies in radiation oncology
- **April 28 : Tony Waker** (Ontario Institute of Technology, Oshawa, ON) *Three and a half conversations about one thing: Experimental dosimetry*
- **May 19 : Panagiotis Papadimitroulas** (BET Solutions, Athens, Greece) *Moving to personalized nuclear medicine: An "in silico" perspective*
- May 26: Jamie Near (Robarts Research Institute, Western University, London, ON)

  Dynamic measures of brain chemistry and metabolism using "in vivo"

  magnetic resonance spectroscopy

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