

MPU SEMINAR SERIES : 2015-2016

Fall 2015-2016

August 28: Ivan Buzurovic (Medical Physics/Biophysics, Harvard Medical School, Boston, MA)
Innovative brachytherapy

September 11: Ryan Flynn (Medical Physics, U Iowa, Iowa City, IA)
Rotating shield brachytherapy for prostate and cervical cancer

September 18: Avishek Chatterjee (Nuclear Physics, U Geneva, Geneva, Switzerland)
Searching for new physics using the ATLAS detector at the large hadron collider

September 24-25: Various speakers
MPRTN-NSERC CREATE Workshop, RI-MUHC

October 09 : Richard Richardson (Canadian Nuclear Laboratories, Deep River, ON)
Are ionizing radiation effects more mitochondria-centric than nucleus-centric?

October 16 : Andrea Armstrong (Radioisotope Development, McMaster U, Hamilton, ON)
T1 Mapping: The Up & Down (& Up) Story of an Old Technique

October 23 : Ernesto Mainegra-Hing (Ionizing Radiation Standards, NRCC , Ottawa, ON)
Comparison between EGSnrc, GEANT4, MCNP and Penelope for photon beams

November 06 : Omar Chebli (Kirontech, Helsinki, Finland)
Applications of machine learning in healthcare data

November 09 : B. Gino Fallone (Medical Physics, Cross Cancer Institute, Edmonton, AB)
Integrated MRI – Linear accelerator

November 13 : Francisco Nunez (Philips Radiation Oncology Systems, Madison, WI)
Proton treatments in radiotherapy

November 20 : Gassan Massarweh (McConnell Brain Imaging Ctr, MNI, Montréal, QC)
Cyclotron and radiochemistry at the McConnell Brain Imaging Centre today and tomorrow

November 27 : Farrah Flegal (Biodosimetry, Canadian Nuclear Laboratories, Deep River, ON)
Canadian emergency biodosimetry dose response network

Deember 08 : Christopher Johnstone (Physics & Anatomy, U Victoria, Victoria, BC)
Automated microCT image analysis for small animal image-guided radiotherapy

December 08 : Magdalena Bazalova-Carter (Physics & Anatomy, U Victoria, Victoria, BC)
From x-ray fluorescence CT imaging to dose-enhanced radiation therapy

Winter 2015-2016

January 15 : Marco Carlone (Princess Margaret Hospital, Toronto, ON)

SIMAC: A simulated environment for learning linac physics

January 22 : Julien Jouganous (Human Genetics, McGill U, Montreal, QC)

Tumor growth modeling and simulation: Applications to clinical cases and genetics

January 29 : Diane Kelly (Queen's U, Kingston, ON)

Medical physicists & software development

February 05 : Pavlos Papaconstadopoulos (Medical Physics Unit, McGill U, Montreal, QC)

On the detector response and the reconstruction of the source intensity distribution in small fields

February 12 : Margaret Murphy (Patients for Patient Safety, WHO, Cork, Ireland)

The patient experience as a catalyst for change

February 18 : Marta Kersten (McConnell Brain Imaging Centre, MNI, Montreal, QC)

Augmented reality in image-guided neurosurgery

February 19 : Adam Shuhendler (Chemistry/Biomolecular Sciences, U Ottawa, Ottawa, ON)

Enzyme-assembled PET and MRI molecular imaging agents for mapping the early response of tumors to radiation of chemotherapy

February 26 : Marat Seydaliev (Canadian Nuclear Laboratories, Deep River, ON)

GEM-based TEPC for neutron dosimetry

March 18 : Claudine Gauthier (Physics, Concordia U, Montreal, QC)

MRI of oxidative metabolism in the brain

April 01 : Cynthia Menard (Radiation Oncology, CHUM Hôpital Notre-Dame, Montreal, QC)

MRI-guided radiotherapy for prostate cancer

April 22 : Jack Sankey (Physics, McGill U, Montreal, QC)

Towards ultrasensitive, optically-defined mechanical sensors

May 20 : David Rogers (National Research Council / Medical Physics, Carleton University, Ottawa, ON)

How to accurately represent and measure a radiotherapy beam's spectrum

May 27 : Denise Miller (Lightsource, Saskatoon, SK)

The biomedical imaging and therapy beamlines at the Canadian Light Source synchrotron