



Canadian Association
of Physicists

Association canadienne
des physiciens et physiciennes

Contribution ID: 2305

Type: **Plenary Speaker / Conférencier(ère) plénier(ère)**

Machine Learning for Medical Image Analysis

Wednesday 13 June 2018 17:00 (20 minutes)

Over the last decade, machine learning (ML) methods have become increasingly important in medical imaging. In addition to more traditional classification tasks, ML is now being used in many other applications including object search and segmentation, image registration and even image reconstruction. Recent advances in deep learning have accelerated this trend and it is now possible to achieve human level performance in several diagnostic tasks where large databases of labelled images are available. This talk will provide an overview of this rapidly changing field and will describe how convolutional neural networks can be used for classification and segmentation in radiology and digital pathology. The challenges associated with translating deep learning applications into clinical practice will also be explored.

Author: Dr MARTEL, Anne (Sunnybrook Research Institute; Department of Medical Biophysics, University of Toronto)

Presenter: Dr MARTEL, Anne (Sunnybrook Research Institute; Department of Medical Biophysics, University of Toronto)

Session Classification: W-PLN1 Plenary Session | Session plénière - Anne Martel, U.Toronto "Machine Learning for Medical Image Analysis"

Track Classification: Herzberg Public, Plenary, and Medal Talks / Conférenciers des sessions Herzberg, plénières et médaillés (CAP-ACP)