Symposium title : **Prospects in artificial intelligence neuroscience**

Organizers:
Jean-Baptiste Poline, Julien Doyon, Alan Evans and the Local Organizing Committee

Time: Thursday 25th, 10:00H New York, 15.00 London, 22.00H Hong Kong
OHBM 20202 online meeting

Speakers

Tal Arbel
Affiliations: McGill University
Title: *Modelling and Propagating Uncertainties in Machine Learning for Medical Images of Patients with Neurological Diseases*

Anna Schapiro
Affiliations: University of Pennsylvania
Title: *Learning distributed representations in the human brain*

Blake Richards
Affiliations: MILA and McGill University
Title: *Mapping the brain with loss functions*

This symposium is gathering three world class specialists at the intersection of neuroscience, brain imaging, and artificial intelligence, giving the audience an update on three key research directions. First, Tal Arbel will describe approaches for modelling and propagating uncertainties in deep learning predictions from brain images of patients with neurological diseases, a crucial aspect for the integration and buy-in of these techniques in a clinical context. Anna Schapiro will follow with her recent empirical and neural network modeling work, inspired by human neuroimaging insights, that asks the question: how do we learn distributed representations? Last, Blake Richards will combine neuroscience and machine learning to map out different pathways of the visual cortex using some of the fundamental building blocks of machine learning.