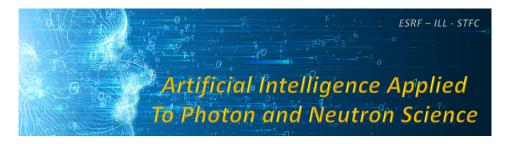
## Artificial Intelligence Applied to Photon and Neutron Science



Contribution ID: 39 Type: not specified

## Introduction to Machine Learning and Deep Neural Networks for scattering science

Tuesday, 12 November 2019 14:00 (50 minutes)

I will give a brief introduction to modern machine learning and deep learning techniques aimed at researchers planning to use them for X-ray and neutron scattering applications. Areas covered will include basic ML terminology and concerns, a quick tour of some probabilistic methods including Gaussian Processes (Kriging), and a discussion of modern neural methods including deep nets, auto-encoders, adversarial training, recursive nets, etc.

**Presenter:** Dr TRIGGS, Bill (LJK Grenoble) **Session Classification:** Afternoon 1