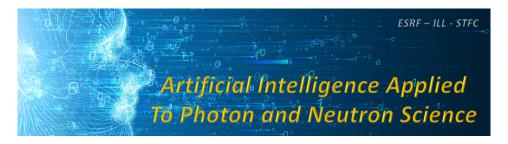
## **Artificial Intelligence Applied to Photon and Neutron Science**



Contribution ID: 68 Type: not specified

## Machine Learning for improving image quality in tomography

Wednesday, 13 November 2019 09:50 (25 minutes)

In recent years, several imaging fields, including computed

tomography, have benefited from the use of deep learning methods. Nonetheless, successful practical application of these

techniques is often inhibited by the lack of sufficient training data. In this talk, we present several approaches for applying deep neural networks to tomography problems where little or no training data is available. These neural networks can for instance be used to improve reconstruction quality, enabling analysis of more challenging samples than is currently possible. Results will be shown for various types of objects, and practical considerations, such as computational requirements and generalizability, will be discussed.

Presenter: Dr HENDRIKSEN, Allard (CWI)

Session Classification: Morning 1