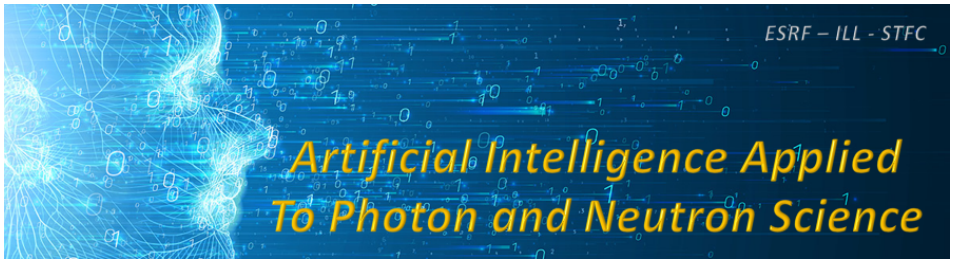

Contribution ID: **43** Type: **not specified**

Machine learning algorithms for image processing in CryoEM

Tuesday, 12 November 2019 17:15 (25 minutes)

Single particle analysis by Electron Microscopy is a well established technique to analyze the three-dimensional structure of biological macromolecules. The acquired images have a signal-to-noise ratio between 0.1 and 0.01 so that all the image processing steps require to be very robust to extremely high levels of noise. Machine and deep learning algorithms have such characteristics when trained with a sufficiently large amount of data. In this talk we will review the applications of these families of algorithms to the different image processing steps along the image analysis pipeline.

Presenter: Dr SORZANO, Carlos Oscar (CNB Madrid)

Session Classification: Afternoon 2