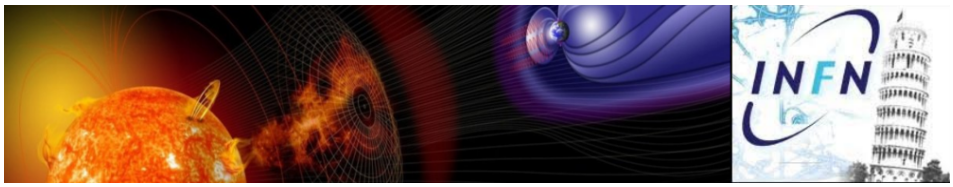

Contribution ID: **75** Type: **not specified**

Artificial Intelligence and the analysis of solar flares data

Wednesday, July 7, 2021 6:40 PM (30 minutes)

This talk focuses on the exploitation of multi-energy and multi-modal space observations of solar flares by means of computational methods relying on artificial intelligence. Specifically, I will show that SDO/HMI magnetograms and machine learning can identify the magnetic properties that mostly impact the occurrence of extreme flaring events; that SDO/AIA EUV maps and image processing can determine in details the flare morphology even in the case of complex and highly energetic events; and, finally, that RHESSI and STIX visibilities together with inverse problems methods can infer information on electron acceleration in the flaring loops

Presenter: Prof. PIANA, Michele (Università di Genova)

Session Classification: Plenary session