EP-IT Data science seminars

SPEAKER: Robert Sulej

TITLE: **How the machine learning conquers reconstruction in neutrino experiments**

DATE: 26 Jul 2017, 11:00

PLACE: 40-S2-A01 - Salle Anderson

ABSTRACT

An evolution from the purely algorithmic approaches towards the machine learning solutions started a few years ago in the neutrino experiments. Now, this process turns into a true boom, especially in the experiments based on the imaging technologies, such as LArTPC's used in MicroBooNE and DUNE experiments or liquid scintillator detector implemented by the NOvA Collaboration. High resolution, image-like projections of events obtained with these detectors proved to be hard pattern recognition problems for the conventional reconstruction techniques. In the seminar, I will present why the neutrino events are so challenging and how the essential difficulties are now being attacked with the machine learning.

Organised by: M. Girone, M. Elsing, L. Moneta, M. Pierini.....
Refreshments will be served at 10h30