

# **SOSC 2018 Second International PhD School Open Science Cloud**



**Monday, September 17, 2018 - Friday, September 21, 2018**

**Department of Physics and Geology**

## **Scientific Program**

The 2018 school is devoted to “Predictive Models” and, as the previous edition, will consist of a serie of lectures, seminars and hands-on sessions on several interconnected topics, as:

The world of Big Data

Data acquisition, managing and handling

Machine and Deep Learning

Computing models and data analysis

Cloud Infrastructures

ML Research to Business

More in details, Data Management will be explored in terms of the full potential for Cloud paradigma exploitation especially from the infrastructural point of view, presenting the state of the art, contemporary issues and challenges for future. Few realistic examples will be used to drive the discussion: Big Data and high throughput requests, streaming and security. Machine Learning will be also discussed in terms of Predictive Models, investigating specific data structures for ML technologies.

The school is organised to serve scientific communities: High Energy Physics, Material Simulation, Meteorological and Environmental studies, etc. Is intended to deeply discuss the design of new computing infrastructures and analysis models for scientific research, both in terms of data analysis than in terms of risk analysis and mitigation templates.

Nevertheless, in this edition a complete session will be dedicated to introduce and discuss specific interplays with private companies and business needs, starting from specific use cases.

Lectures will be given by speakers directly involved in the design, development and management of the most important actions related to the European Cloud Infrastructure, as well as experts in the specific topics of the school.