

# Third International School on Open Science Cloud

The 3rd edition of the international School on Open Science Cloud will be held in Bologna, 16-20 September 2019 and is organised by INFN, the Department of Physics of the University of Bologna and the Departments of Physics and Geology and of Economics of the University of Perugia.

## Basic Requirements

The School is multi-disciplinary and targeted at postgraduate researchers including bachelor degree or equivalent in fields such as physics, statistics, computer science, computer vision, biology, medicine, engineering working at any research institute, with experience in data analysis, in computing or in related fields. We welcome applications from all nationalities, and encourage all qualified persons to apply.

## Academic Program

The 2019 school's theme is "**Intelligent Systems**". The programme is organized over two tracks:

### Machine Learning Methods and Applications

- Introduction to Machine and Deep Learning
- Statistical Learning and Data Analysis
- Data Science

### Computing infrastructures

- Tools for Data Handling and Processing
- Cloud Solutions for Advanced Big Data Workflows
- Machine Learning in Industry

More in details, the first track will provide a comprehensive introduction to basic Machine and Deep Learning concepts of as a way to set a common ground between participants. It will progress with advanced lectures intended for students who are looking to develop their knowledge and skills on Data Science techniques and applications.

The second track will provide students both with basic and advanced knowledge on how to build and use cloud-based infrastructures to implement workflows based on technologies and tools such as Hadoop, HDFS and Spark. These will be used as an effective approach to pre-process data-sets and to train developed Machine Learning models, and will include a taste of bleeding edge solutions, such as TPU-based processing.

The school is structured in lectures and hands-on sessions. The hands-on sessions will be designed to allow students to exercise with the most popular systems introduced in the lectures, taking tasks from real-world leading data driven scientific communities as examples.

The hands-on programme foresees the development of individual projects, which will allow students to also perform an optional real Kaggle competition.

The school is committed to a multidisciplinary approach, therefore special attention will be given to introducing and discussing collaborations with industry and with business needs, starting from specific use cases.

Lectures and hands-on sessions will be given by national and international experts, as well as by researchers involved in the European Open Science Cloud landscape.

## SOSC Certificate and Diploma

An attendance certificate will be issued to the students attending the whole school programme. Moreover, the school will provide an official SOSC School of Computing diploma upon successful completion of a project-based final test that will take place towards the end of the school.

## Fees and Enrollment

Registration fee will include morning & afternoon coffee breaks, and a social dinner and **final application deadline is September 5 2019**

- Early bird (until 20 July): €150 -
- Full ticket (until 5 September): €250 -

Payment Method: Bank Transfer

Support for a limited number of applications is possible and can be requested directly to the School secretariat.

**If you have any issues with the registration or the payment please contact [sos19-pc@lists.infn.it](mailto:sos19-pc@lists.infn.it)**

## Additional Information

Participation is limited to 50 participants, selected from any curriculum related to the topics covered by the school.

## Venue

**CNAF**, Centro nazionale dell'INFN per la ricerca e lo sviluppo nelle tecnologie informatiche e telematiche.

Viale Berti Pichat 6/2 40127, Bologna, Italy

Detailed information about the school, transportations, logistics and lectures are available at the following URL: <https://agenda.infn.it/event/19049/page/4624-travel-accommodation>

## School Contact

School On Open Science Cloud 2019 - September 16-20 2019 [sosc19-pc@lists.infn.it](mailto:sosc19-pc@lists.infn.it)

SOSC19 URL: <http://web.infn.it/SOSC19>

### **The organising committee**

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