

The CODATA-RDA Research Data Science Advanced Workshops on Bio-informatics, Climate Data Sciences, Extreme Sources of Data and Internet of Things(IoT)/Big-Data Analytics



19 - 23 August 2019
Trieste, Italy

Further information:
<http://indico.ictp.it/event/8847/>
E-mail: smr3376@ictp.it

During this activity, several applied/thematic workshops on Research Data Science run in parallel.

Extended Topics list:

- **Bioinformatics:** This workshop focuses on building Machine Learning workflows using NGS Data. Topics include: Experimental design; Introduction to NGS data analysis; Machine Learning in NGS; and CWL. Participants should be familiar with UNIX shell and R programming language.
- **IoT and Big Data Analytics:** This workshop presents the analysis of vast amounts of data produced by embedded devices, sensors, appliances and other data-collecting systems in real time using new processes and tools for collecting, storing and processing IoT big data, event/streaming data. Participants should be familiar with software installation and programming in R or Java or Python. Professionals & corporate entities should apply for this workshop via the ITU Academy.
- **Climate Data Sciences:** This workshop will introduce Cloud-Computing-based data access, processing and visualisation tools for climate science, including the Copernicus climate data services platforms and the CMIP Earth System Grid. Participants will work in small project teams and should have a background in climate sciences and/or climate modeling.
- **Extreme Sources of Data:** This workshop introduces the basics relative to a cut-and-count particle physics analysis as performed in the ATLAS Collaboration (Large Hadron Collider). Topics to be covered include phenomenological, experimental and data-analysis aspects of the Standard Model; software development and tools for analysis and reproducible science and sharing. Participants should have taken at least one course on particle physics at high education level.

How to apply:

Online application:
<http://indico.ictp.it/event/8847/>

Female students and scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants from developing countries. Individuals seeking an introduction to Research Data Science can apply to the Summer School that runs immediately before the workshops. Professionals and corporate entities should register/apply for the Advanced Workshop on IoT and Big-Data Analytics via the ITU Academy platform.

Directors:

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Deadline:

18 April 2019



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