This activity focuses on building a range of data-related skills that are vital for addressing trans-disciplinary challenges in contemporary research work.

**Description:**
The Summer School builds competence in data analysis and security for participants from all disciplines and/or backgrounds from sciences to humanities. Topics to be covered include principles and practice of research data management, data curation, data security; Open Science, visualization, machine learning and artificial neural networks.

The activity includes practical hands-on sessions on techniques and applications for large-scale data handling, analysis, visualization and modeling on a variety of compute infrastructure including high performance compute platforms/systems.

An associated activity (SMR3257) focusing on Data Sciences for Extreme Sources of Data, Bioinformatics, IoT/Big-Data Analytics and Climate Data Science will run immediately after this event and requires a separate application.

**How to apply:**
Online application:
http://indico.ictp.it/event/8329/

Female scientists are encouraged to apply.

**Grants:**
A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

**Deadline:**
21 May 2018

**Directors:**
A. HARRISON (Department of Mathematical Sciences, University of Essex)
S. HUDSON (CODATA)
H. SHANAHAN (Department of Computer Science, Royal Holloway University of London, UK)
C. VAN GELDER (Dutch Techcentre for Life Sciences (DTL), Netherlands)
R. MURENZI (TWAS)
T.K. ATTWOOD (University of Manchester, UK)
R. QUICK (Indiana University, U.S.A)
S. JONES (University of Glasgow, UK)
N. MULDER (University of Cape Town, South Africa)
U. SINGE (ICTP)
M. ZENNARO (ICTP)
A. TOMPKINS (ICTP)

**Speakers:**
The Carpentries
Data Curation Centre
European Open Science Cloud
CERN

Further information:
http://indico.ictp.it/event/8329/
smr3231@ictp.it