# **ICTP-Africa Joint School on** Rainfall and Water Resources Management



## 25 - 29 July 2022 **ICTP - EAIFR Kigali and Online**

As water is an important resource for different uses, an accurate estimate of how much water is available is crucial for planning purposes in areas such as agriculture, energy production, and others sectors or assets. In addition, this timely information is important for flood and drought management.

This joint school will train Africans in hydrological modeling, hydrology, and hydroclimatology. At the same time, the workshop will promote collaboration and data sharing between workers in different African countries as well as interaction between African researchers/workers and their counterparts in other parts of the world. The school will link with the Global network on Water and Development Information for arid lands (G-WADI) under UNESCO'S Intergovernmental Hydrology Program (IHP) and will examine issues related to water security. The activity will contribute to the implementation of the 9th phase of IHP 2022-2029, "Science for a Water Secure World in a Changing Environment".

#### **Topics:**

- Introduction to hydrology and water cycle. From real time flood forecast to climate flood risk projection.
- Introduction to the PERSIANN family of products including the iRain system for climate risk management,
- Use of iRain for weather monitoring, analysis, and resilience building.
- Development of region-specific
- · Fostering of collaboration and cooperation among technical personnel and scientists in the Africa on weather and climate monitoring and
- Hydroclimatic projection of river flood and river drought hazard using global and regional climate model projection
- Training on analysis/evaluation of local in situ rain gauge data: each participant is required to bring local in situ rain gauge

Further information: http://indico.ictp.it/event/9814/ smr3724@ictp.it Activity Secretary: S. Henningsen

#### **Organisers:**

Akin-Ojo, Omololu (ICTP-EAIFR, Rwanda) Logan, William S. (ICIWaRM (under the auspices of UNESCO) / Univ. Arizona, USA) Makarigakis, Alexandros (UNESCO Regional Office for Eastern Africa) Mishra, Anil (Intergovernmental Hydrological Programme (IHP), **Division of Water Sciences, UNESCO, Paris, France)** Nguyen, Phu (Univ. California, Irvine USA) Partey, Samuel (UNESCO Regional Office for Eastern Africa) Sorooshian, Soroosh (Univ. California, Irvine USA) Wali, Umaru Garba (University of Rwanda)

#### **ICTP Scientific Contact:**

Coppola, Erika (ICTP)

#### **Speakers:**

Coppola, Erika (ICTP, Italy) Logan, Williams S. (Univ. Arizona, USA) Makariaakis, Alexandros (UNESCO Regional Office for Eastern Africa) Nguyen, Phu (Univ. California, Irvine USA) Sorooshian, Soroosh (Univ. California, Irvine USA) Wali, Umaru Garba (Univ. Rwanda)

hydrological models, and providing and understanding of how climate change is influencing water availability in Africa and in different regions of Africa.

data from their home country for the purpose of evaluation of satellite rainfall data estimates and use in bias correction for improving the satellite precipitation estimates for future use over their regions

# How to apply:

**Online application:** http://indico.ictp.it/event/9814/

Female scientists are encouraged to apply.

## **Registration:**

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.

And other international lecturers/instructors

#### **Deadline:**

# 15 July 2022









**International Centre** for Theoretical Physics

