

African School on Quantum Simulation and Quantum Information Science (ASQSIS)



5 - 9 September 2022
Kigali, Rwanda

Further information:
<http://indico.ictp.it/event/9807/>
smr3686@ictp.it

The aim of this school is to introduce students to advanced quantum mechanics concepts relevant to the growing field of quantum technologies, via a two-fold approach combining theoretical and computational aspects.

The first part of the school will feature an introduction to quantum information, computation and simulation. This part will also include a panoramic view of most quantum hardware platforms - atomic, photonic, and solid state.

The second part of the school will consist of an introduction to Qutip - an open-source software to simulate quantum systems, as well as several case studies in connection to real-world applications of quantum computing and simulation. Prior knowledge of quantum mechanics is necessary. Prior knowledge of Python is highly recommended. It is also highly recommended that students study about QuTiP (there are tutorials online) before joining the school, and also for the students to bring their laptops, to do practice sessions at the school.

The event is aimed at master and graduate students from all over Africa, and will feature a combination of blackboard-style lectures and tutorials on computational techniques.

Directors:

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ICTP Scientific Contact:

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Lecturers:

S. Cross (RIKEN)
M. Dalmonte (ICTP, Trieste, Italy)
A. Pitchford (Aberystwyth University)
A. Sampera (ICREA & Universitat Autònoma de Barcelona)

How to apply:

Online application:
<http://indico.ictp.it/event/9807/>

Female Scientists are encouraged to apply.

Grants:

There is no registration fee.

Grants will be given to a selected number of participants.

Deadline:

15 June 2022

