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INTRODUCTION TO QUANTUM COMPUTATION AND SIMULABILITY



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In this minicourse, we will introduce the essentials of the fascinating field of quantum computation and its (classical) simulability. The scope of the course will be self-contained. We will start from a general overview of the basics of quantum information, but will progress towards more advanced topics requiring a higher level of mathematical abstraction.

In particular, we intend to address current research topics including: approaches to the demonstration of quantum computational supremacy; useful and reliable quantum simulators; verification of quantum computations; connections with machine learning, etc.

Application deadline: August 17, 2018

Online application and more information: www.ictp-saifr.org/qcomp2018