« Atelier sur les méthodes mathématiques et informatiques pour les systèmes quantiques »
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"Workshop on Mathematical and Computational Methods for Quantum Systems"
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Advances in algorithms for the simulation of quantum systems on a quantum computer

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The simulation of quantum mechanical systems is one of the most prominent foreseen application of quantum computers. While analogue simulations are already being realized experimentally, this presentation will focus on digital simulations, which employ an error-corrected quantum computer to realize simulations of arbitrary precision. I will review some of the challenges and opportunities of this field, and briefly describe some of the recent innovations.

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