

# COLLOQUIUM

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Interactive proofs for  
quantum computations



Date: Monday July 6, 2015  
Time: 2:00 – 3:00 PM  
Room: RIC 208

**Abstract:**

Quantum computers promise to be able to solve many problems faster than is possible on ordinary 'classical' computers. For some of these problems, such as quantum simulation, there is no known way that a classical computer can even verify, after the fact, that such a computation has been done correctly. In this talk I will discuss a construction that allows us to take any quantum computation and turn it into an interactive proof, where a group of quantum computers can convince a classical computer that a computation has been carried out correctly.