

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, November 30
3:00 – 4:00 PM
Maria Sanford, Room 101

BASIC NOTIONS ON QUANTUM COMPUTATION

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Abstract: Quantum computers are now a reality and with them come possibilities of machines that can substantially outperform classical computers. In this talk we will explain the type of operations that a quantum computer can do. We will go through the notion of qubit, quantum gate, measuring, quantum states and entanglement. We will end the talk by explaining in detail the Alice-Bob example of teleportation.

Rigetti, one of the companies that have several quantum computers, has created a software that simulates a quantum computer. I will be showing this software during the talk. The quantum processor instruction language is named Pyquil and it is available to everybody.

For further information:
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