

Electrical & Computer Engineering and Computer Science Department (ECE&CS)

Conference

Quantum Computing with Nuclear Spins

Offered by: Dr. Marco A. Pravia



Quantum computers have recently emerged as a potentially powerful alternative to the Turing Machines that have driven the digital revolution over the past 50 years. Quantum computers and information processors encode information on objects that are governed by the laws of quantum physics. As a result information encoded on these objects can exist in quantum superpositions, allowing a kind of parallelism intrinsically different from what is available in classical Turing Machines. Here, we provide experimental results of basic operations performed on small quantum processors. In addition, we describe methods for precisely controlling quantum information while avoiding experimental imperfections.

Date: September 23, 2004 (Thursday)

Hour: 10:00 to 11:00 AM.

Place: Room C, 3rd floor, Library

**Sponsored by the Computer Science program
Everybody is welcomed**