

MATHEMATICS DEPARTMENT  
North Carolina State University

ALGEBRA SEMINAR

Wednesday, September 15, 2004

Professor Shao-Ming Fei  
Capital Normal University, China  
and University of Bonn, Germany

An Introduction to Quantum Information and  
Computation

**ABSTRACT:** We introduce the basic concepts and ideas in quantum information processing and computing. In particular, quantum gates, quantum key distribution, dense coding, quantum cloning, quantum teleportation, quantum algorithms and quantum error correction will be introduced in detail.

Dr. Fei will give a second talk, "Theory of Quantum Entanglement and Related Mathematics", on September 22.

2:35 - 3:25pm HA 335

Faculty and Students are invited to attend.