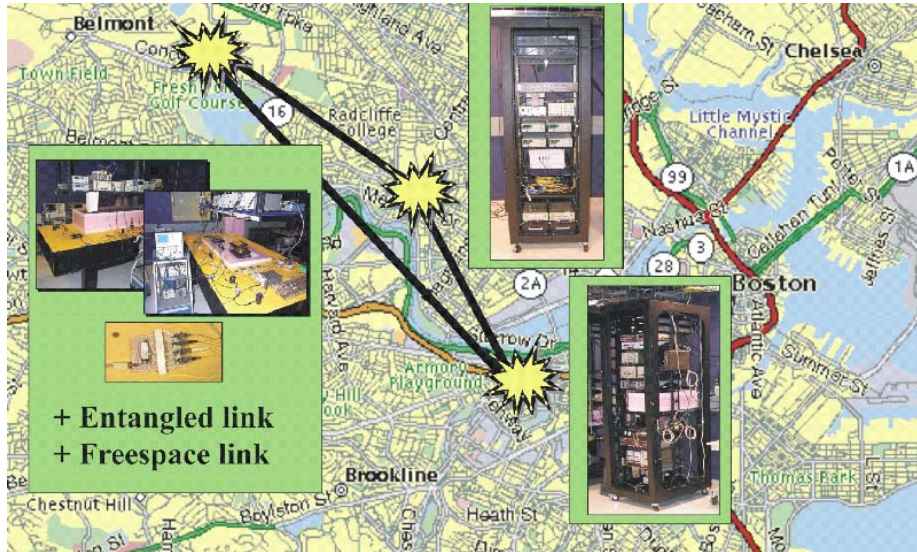


DEPARTMENTS OF PHYSICS AND COMPUTER SCIENCE PRESENT

Quantum Information Science: Applications and Enabling Technologies

Dr. Jonathan Habib
BBN Technologies



It's been three decades since Richard Feynman proposed using quantum systems for computation. Today, quantum computation joins quantum communication and quantum metrology to form the field of *quantum information*, an exciting area of contemporary research in physics, computer science, and engineering. I will discuss some of the most prominent applications of quantum information, including systems developed at BBN Technologies. Finally, I will discuss key technologies needed to enable a large-scale quantum information infrastructure.

Jonathan Habib received his B.A. in physics from Colgate University and PhD in applied physics from the University of Rochester. In 2000 he was awarded a NASA GSRP fellowship for his graduate work on quantum coherence in superconducting circuits. He was a research member of the MIT physics department from 2003 – 2005, and is currently a senior scientist at BBN Technologies in Cambridge, MA. His work is focused on the applications and development of quantum information systems. In 2007 he received the Anita Jones Award for classified work designated a breakthrough critical to the national security of the United States.

Thursday, April 2, 2009
12:30 PM (lunch provided at 12:15 PM)
McCardell Bicentennial Hall 104

This event is sponsored by the Departments of Physics and Computer Science