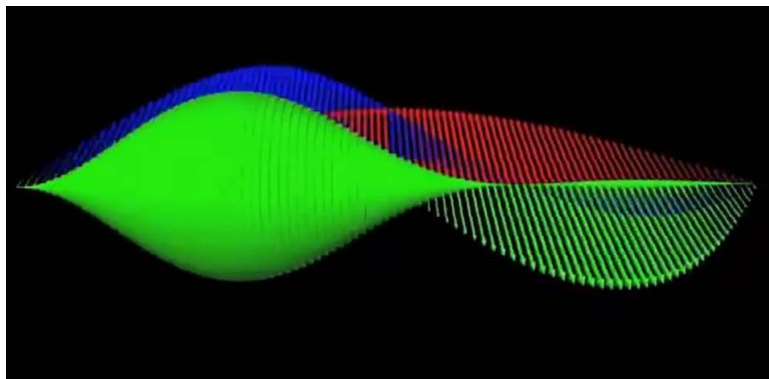


Department of Mathematics

Spring 2015 Colloquium Series



“Quantum Tunneling and Computation”

with Kenneth Owens, Ph.D. , Tim Lauck, Steven Margell, Brian Page, and Kristy Points

Professor, Lecturers and Students, Department of Mathematics
Humboldt State University

Thursday, April 23, 2015

Behavioral Social Sciences Building Room 166, 4 p.m.

Quantum tunneling is the process by which hydrogen atoms tunnel into each other, fuse and produce helium atoms. This process releases tremendous amounts of energy and powers the sun. In this talk we will introduce quantum wave functions, Schrödinger's equation and Gamow's theory of alpha particle decay to allow us to derive probabilities for quantum tunneling. Finally we will compare these results with supercomputer simulations.

Kenneth Owens is a professor of mathematics at Humboldt State University, Tim Lauck teaches lower division math at HSU. Steven Margell is a graduate teaching assistant. Brian Page and Kristy Points are Computer Science majors at HSU.

For a complete abstract, go to <http://www.humboldt.edu/math/news-and-events/math-colloquium>

We invite you to the Pre-colloquium Tea on the third floor of the BSS building at 3:30.