CALIFORNIA STATE UNIVERSITY, LONG BEACH

THE MATHEMATICS COLLOQUIUM

presents

Dr. Slava Krushkal

University of Virginia

speaking on

Fourier transform, Kazhdan groups and quantum topology

Friday, March 11, 2005 **12:00PM-1:00PM**

LA5-267

Abstract: I will discuss a question about the metaplectic representation of SL(2,Z) which leads to a problem in Fourier analysis on the real line. A variant of Kazhdan's property (T)– concerning the rigidity of representations of a group–implies that this problem does not have a solution. Quantum representations provide a generalization of this to mapping class groups of surfaces, where Kazhdan's property is not known to hold. (Joint work with M. Freedman.)