

The seventh Takagi Lectures

November 21, 2009 (Sat) 17:00–18:00

November 23, 2009 (Mon) 09:30–10:30

Graduate School of Mathematical Sciences

The University of Tokyo

The Kervaire invariant problem

Michael Hopkins

(Harvard University)

Abstract

The existence of framed manifolds of Kervaire invariant one is one of the oldest unresolved problems in algebraic topology. Important questions about smooth structures on spheres and on the homotopy groups of spheres depend on its solution. In these talks I will describe joint work with Mike Hill and Doug Ravenel which solves this problem in all dimensions except 126.