

Topology Seminar

Stephen McKean

of Harvard University will be speaking on

Varieties from the Differentiable Viewpoint

on November 14 at 4:30 in
MIT Room 2-131

Many beautiful theorems in differential topology arise from the interplay of homotopy theory and smooth structures on manifolds. Similarly, motivic homotopy theory and algebraic structures on varieties combine to yield differential-topological tools in algebraic geometry. I will survey various results in motivic homotopy on oriented intersections, fixed point theorems, framed cobordism, Morse theory, and the Poincaré-Hopf theorem. Time permitting, I will discuss how these tools relate to enumerative geometry over non-closed fields.

For information, write: camkru@mit.edu