

“When true knowledge proves irrelevant, one is free to invent.” –Javier Marías

The Trivial Notions Seminar

Proudly Announces

Hirzebruch Problem 8

A talk by
Samik Basu

Abstract

We ask the question: Which homology classes of manifolds over integers are representable by orientation classes of submanifolds? In an effort to answer the question we first see that all the homology classes upto dimension 6 are representable by submanifolds. Also for an m -dimensional manifold M classes in $H_{m-1}(M)$ and $H_{m-2}(M)$ are always representable. So to get the first possible example of a non representable class we must look in the 7th homology of 10-dimensional manifolds. I will discuss an example of a 10-dimensional manifold and an element in H_7 which is not representable.

Thursday, February 12th at 2:07 pm
Science Center 507