

Ronald J. Stern

Title: Pinwheel Surgery

Abstract: An unsettled question is whether every (simply-connected) smooth 4-manifold has infinitely many distinct smooth structures. In this lecture we develop techniques to show that many 4-manifolds are obtained by surgery on (null-homologous) tori embedded in blow-ups of a connect sum of projective planes and, as a result, these manifolds do possess infinitely many distinct smooth structures.