

Talk Title: A Homotopy Theoretic Analogue to Wall's Theorem

Abstract: It is a well-known result of C.T.C. Wall's that one may decompose a simply connected 6-manifold as a connected sum of two simpler manifolds. Recent work of Beben and Theriault on decomposing based loop spaces of highly connected Poincaré Duality complexes has yielded new methods for analysing the homotopy theory of manifolds. In this talk we will expand upon these methods, which we will then apply to prove a higher dimensional homotopy theoretic analogue to Wall's Theorem.