

Speaker: Langte Ma

Title: Corks and exoticness of 4-manifolds

Abstract: In 4-dimensional topology, the notion of cork was introduced by Akbulut as a contractible Stein 4-manifold whose boundary admits a self-diffeomorphism that extends homeomorphically but not diffeomorphically to its interior. One important feature is that any exotic copy of a simply-connected 4-manifold differs from the original one by a cork twist. In this talk, we shall sketch a proof of this result following Matveyev, and survey some recent developments.