



Speaker: Weiyi Zhang
University of Michigan

Thursday, April 18, 2013
2:00 PM
258 Hurley Hall

Title: J-holomorphic curves in a nef class

Abstract:

After explaining complexity of arbitrary reducible subvariety when the ambient manifold is of dimension 4, we offer an upper bound of the total genus of a J-holomorphic subvariety when the class of the subvariety is J-nef. It seems new even when J is integrable. For a spherical class, it has particularly strong consequences. It is shown that, for any tamed J, each irreducible component is a smooth rational curve. We completely classify configurations of maximal dimension. To prove these results, we treat subvarieties as weighted graphs and introduce several combinatorial moves. This is a joint work with Tian-Jun Li.