Department of Mathematics University of Notre Dame

GEOMETRIC ANALYSIS SEMINAR

Speaker: Shih-Kai Chiu University of Notre Dame

Date: Thursday, March 30, 2017

Time: 11:00 AM

Location: 258 Hurley Hall



Lecture Title:

Constant scalar curvature Kahler metrics on blow-ups I

Abstract

Let (M, ω) be a compact Kahler manifold M with a constant scalar curvature Kahler (cscK) metric ω . Suppose M does not have nonzero holomorphic vector fields. Then Arrezo and Pacard show that for any $p \in M$, the blow-up $\mathrm{Bl}_p M$ also admits cscK metrics which are close to the original one on M. In this talk, I am going to set up the perturbative method to construct such cscK metrics on blow-ups, modulo analytical details.