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Joint Geometric Analysis Seminar

(Part of MIST program)

Singularities in global pluripotential theory

Dr. Mingchen, Xia

IMJ-PRG

Abstract

In the study of the geometry of complex projective manifolds or compact Kähler manifolds, it is important to understand a class of functions on these manifolds, called quasi-plurisubharmonic functions. Traditionally, one is interested in regular or mildly singular quasi-plurisubharmonic functions as the solutions to the Monge—Ampère equations are usually regular. In recent years, it is gradually realized that singular quasi-plurisubharmonic functions also play an important role. In this talk, I will give a general introduction to the systematic study of the singularities of quasi-plurisubharmonic functions carried out by Darvas, Di Nezza, Lu and me in the last few years. In particular, I will explain the important notion of good singularities and its various applications

Date: 23 July 2024 (Tuesday)

Time: 10:30 am-11:30 am

Venue: Room 502a, AB1

All are Welcome