



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Seminar in Geometry and Topology

Room 290C ,Ziskind Building  
on Tuesday, Jan 23, 2018  
at 16:15

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Quantization of extremal metrics and applications

Abstract:

An extremal metric, as defined by Calabi, is a canonical Kahler metric: it minimizes the curvature within a given Kahler class. According to the Yau-Tian-Donaldson conjecture, polarized Kahler manifolds admitting an extremal metric should correspond to stable manifolds in a Geometric Invariant Theory sense.

In this talk, we will explain that a projective extremal Kahler manifold is asymptotically relatively Chow stable. This fact was conjectured by Apostolov and Huang, and its proof relies on quantization techniques. We will explain various implications, such that unicity or splitting results for extremal metrics.

Joint work with Yuji Sano ( Fukuoka University).