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數學科學研究所

香港中文大學

# Joint Geometric Analysis Seminar

(Part of MIST program)

*Some new rigidity results in complex geometry*

*Prof. Ved Datar*  
*Indian Institute of Science*

## Abstract

I will discuss two new results on rigidity in Kähler geometry. I will first talk about the (almost) rigidity of Kähler manifolds with positive Ricci curvature and almost maximal volume. I will then discuss the rigidity of Kähler manifolds with positive bi-sectional curvature and maximal diameter. The first result is a complex analogue of a famous volume rigidity theorem of Colding, and the second result is the complex analogue of the well-known maximal diameter theorem of Cheng. This is joint work with Harish Seshadri and Jian Song.

Date: March 16, 2022 (Wednesday)

Time: 11:00am – 12:00pm (Hong Kong time)

ZOOM link: <https://cuhk.zoom.us/j/91805734715>

*All are Welcome*