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# Joint Geometric Analysis Seminar

(Part of MIST program)

## *Free boundary problems on RCD(K,N) spaces*

*Prof. Hui-Chun Zhang  
Sun-Yat Sen University*

### Abstract

RCD(K,N) spaces is a class of metric measure spaces with a generalized Ricci curvature form bounded by  $K$  and dimension bounded from above by  $N$ . In this talk, we will introduce some regularity results of solutions to the one-phase free boundary problems, including the local Lipschitz regularity of the solutions and the partial regularity of their free boundaries. This talk is based on the joint work with Chung-Kwong Chan and Xi-Ping Zhu.

Date: February 24, 2023 (Friday)  
Time: 3:00pm-4:00pm (Hong Kong time)  
ZOOM link: <https://cuhk.zoom.us/j/91805734715>

*All are Welcome*