DEPARTMENT OF MATHEMATICS
THE CHINESE UNIVERSITY OF HONG KONG

MATH-IMS Joint Colloquium Series
The Chinese University of Hong Kong

This MATH-IMS Joint Colloquium Series in pure mathematics is organized by the Department of Mathematics and the Institute of Mathematical Sciences (IMS) at the Chinese University of Hong Kong. The series focus on all areas of pure mathematics together with theoretical developments and applications.

Date: November 26, 2020 (Thursday)
Time: 11am – 12noon (Hong Kong Time)
Zoom Link: https://cuhk.zoom.us/j/98846779826

Nonuniqueness in Mean Curvature Flow

Speaker: Professor Lu Wang

California Institute of Technology

Abstract: Mean curvature flow is the gradient flow of area functional that decreases the area in the steepest way. In general, the flow will develop singularities in finite time. It is known that there may not be a unique way to continue the flow through singularities. In this talk, we will discuss some global features of the space of mean curvature flows that emerge from cone-like singularities. This is joint with Jacob Bernstein.

Bio: Professor Lu Wang obtained her B.S. in Mathematics from Peking University in 2006, and later graduated with a PhD in 2011 from MIT, under the supervision of Prof. Tobias Colding. From 2011 to 2014, she was a J.J. Sylvester Assistant Professor at Johns Hopkins University. In 2015, she became an assistant professor at University of Wisconsin-Madison. Prof. Wang has been a postdoc fellow at MSRI, a Chapman Fellow of Mathematics at Imperial College London, and a member of the IAS. In 2019, Prof. Wang moved to Caltech, where she is currently a Professor of Mathematics. Prof. Wang's primary research interest is geometric analysis, more specifically, on geometric flows and related topics such as minimal surfaces and low-dimensional topology. She has obtained several major breakthroughs in understanding the singularities of the mean curvature flow and Ricci flow. Prof. Wang was awarded a Sloan Fellowship in 2016, a von Neumann Fellowship in 2018.