



Department of Mathematics  
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# Joint Geometric Analysis Seminar

## Convexity Estimates for Solutions of Elliptic Partial Differential Equations

*Professor Shujun Shi*  
*Harbin Normal University*

*Abstract: In this talk, we are concerned on the convexity estimates for solutions of some elliptic problems obtained in the pass few years. By the classical maximum principle, we give the convexity estimates for the solutions to the torsion problem, for the first eigenfunction and the Green's function of the Laplace operator in a convex bounded domain. In addition, we also give some results about the curvature estimates for the level sets of solutions to elliptic Monge-Ampère equations in Euclidean space or space form.*

Date: January 15, 2020 (Wednesday)  
Venue: Room 502a, Academic Building I  
The Chinese University of Hong Kong, Shatin  
Time: 11:00am – 12:00noon

*All are Welcome*