

One-day Workshop on Geometry and Analysis on Manifolds

June 19, 2017, Shanghai

Room 2201, Guanghua East Building, Fudan University

Schedule

Lecture 1

Title: Estimates for eigenvalues of the clamped plate problem

Speaker: Qing-Ming Cheng, Fukuoka University

Time: 14:00-15:00

Abstract: In this talk, we will discuss estimates for eigenvalues of the clamped plate problem. First of all, we review universal estimates for eigenvalues of the Laplacian. As applications, we give sharper estimates on lower bounds and upper bounds for eigenvalues. Furthermore, we study estimates on a gap between two consecutive eigenvalues of the clamped plate problem.

Teak Break: 15:00-15:30

Lecture 2

Title: A gap theorem in hyperbolic space and hemisphere

Speaker: Hai-Zhong Li, Tsinghua University

Time: 15:30-16:30

Abstract: In this talk we give a pinching condition for the characterization of the totally geodesic disk and the rotational annulus among minimal surfaces with free boundary in geodesic balls of hyperbolic space and hemisphere. The pinching condition involves the length of the second fundamental form, the support function of the surface, and a natural potential function in hyperbolic space and hemisphere. This is joint work with Xiong Changwei.

Organizers

Jixiang Fu, Fudan University

Weiping Zhang, Nankai University

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