THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

New Developments in Sphere Covering Inequality

By

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Abstract

In this talk, I will review the Sphere Covering Inequality and present some new forms of the inequality, including a version with singular terms on more general surfaces as well as a dual version. I will also show their applications in the study of singular Liouville-type problems with super harmonic weights. In particular, new uniqueness results for solutions of the singular mean field equation both on spheres and on bounded domains will be discussed. Some new symmetry results for the spherical Onsager vortex equation will also be presented.

Date : **08 January 2020 (Wednesday)**
Time : **11:00am – 12:00noon**
Venue : **Room 3472, Academic Building (Lifts 25-26), HKUST**

All are Welcome!