中央研究院數學研究所

Institute of Mathematics, Academia Sinica

Sinica-NCTS
Geometry Seminar

Speaker：高連庸 Lien-Yung KAO (University of Chicago)

Title：**Ergodic Geometry: when dynamics meets geometry**

Time：11:00-12:30, Friday, Oct. 27, 2017

Abstract：In this talk, our aim is to have a taste of "ergodic geometry". Ergodic geometry is a mix of ergodic theory, hyperbolic geometry, and (Gromov) hyperbolic group theory. In ergodic geometry, people study how dynamics quantities, like entropy and critical exponent, interact and characterize the geometry of the manifolds or groups.

We will start our discussion from basic hyperbolic geometry and ergodic theory. We will take Riemann surfaces as examples to explore interesting results of ergodic geometry such as the growth rate of closed geodesics, entropy rigidities, etc. To do this, we will introduce an important tool in ergodic geometry-Thermodynamic Formalism.

Lastly, if time permits, we will discuss applications of thermodynamic formalism to deformation spaces such as Teichmuller space and higher Teichmuller space.

Venue：Seminar Room 617, Institute of Mathematics (NTU Campus)

Organizer：Prof. Jih-Hsin Cheng (Academia Sinica)、
Dr. Sheng-Fu Chiu (Academia Sinica)

Refreshment：10:30

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