Modern Interactions between Algebra, Geometry and Physics

Lecture Series

Date and Time

June 22 (Wed), 15:00 - 16:30
June 23 (Thu), 15:00 - 16:30
June 24 (Fri), 15:00 - 16:30

Venue

TOKYO ELECTRON House of Creativity 3F, Lecture Theater, Katahira Campus, Tohoku University

Lecturer

Prof. Xiuxiong Chen (Stony Brook)

Title and Abstract

Title

Ricci flow and related topics I, II, III.

Abstract

In Lecture 1, I will introduce Ricci flow which goes back to R. Hamilton. In particular, we will go over evolution equation for curvature and some fundamental theorems proved by R. Hamilton.

In Lecture 2, I will introduce Perelman's new point of view on Ricci flow, which includes monotonicity formula, non-local collapsing and pseudo locality theorem etc.

In Lecture 3, I will discuss more updated works in Ricci flow, in particular, the recent work of Chen-Wang on weak compactness of the space of Ricci flows.