







## On Particles, Stars and Eternity: from the Stability of the Solar System to Plasma Physics

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Date: 13 April 2016 (Wednesday)

Time: 4:30 pm

Venue: Connie Fan Multi-media

Conference Room

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## Abstract:

What will happen, in one million years, to the planets in the solar system? And in one billion years? This topic inspired some of the brightest mathematicians and physicists in the past centuries; entire chapters of the history of sciences emerged from there. If we are beginning to understand the fate of the solar system, such is not yet the case for our good old galaxy; this problem might be related to the famous and mysterious Landau damping in plasma physics. It will be the opportunity to talk about the mathematical core of the nonlinear Landau damping and stability of plasmas, as well as recent developments in fluid mechanics. Confinement, regularity and mixing will come again and again, illustrating the profound unity of mathematics.

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