

MATH-IMS Joint Colloquium Series The Chinese University of Hong Kong

This MATH-IMS Joint Colloquium Series in pure mathematics is organized by the Department of Mathematics and the Institute of Mathematical Sciences (IMS) at the Chinese University of Hong Kong. The series focus on all areas of pure mathematics together with theoretical developments and applications.

Date: April 8, 2021 (Thursday)

Time: 4pm – 5pm (Hong Kong Time)

Zoom Link: <https://cuhk.zoom.us/j/98846779826>

About periodic points of conservative surface diffeomorphisms

*Speaker: Professor Patrice Le Calvez
Institut de Mathématiques de Jussieu*

Abstract: As explained by Poincaré, periodic points are of high importance in the study of the dynamics of volume preserving diffeomorphisms on a manifold M . There is still a lot of open questions concerning periodic points, even in the case where M is two dimensional. We will report on some recent progress about periodic points of area preserving diffeomorphisms of surface and more generally of homeomorphisms with no wandering points.

Bio: Prof. Patrice Le Calvez received his Ph.D. degree in 1987 from Université Paris 7 under the supervision of Prof. Michael Herman, and obtained Habilitation in 1992 at Université Paris 11. He held positions at Université Paris 11 (Orsay), Université Paris 13 (Villetaneuse), and since 2008 he has been a professor at the Sorbonne université. Prof. Le Calvez is a member of the Institut Universitaire de France, and received the Prix Charles Louis De Saulces De Freycinet from Académie des Sciences de Paris in 1995. He spoke in the International Congress of Mathematicians in 2006, and has been the editors of *Mathematische Zeitschrift*, *Annales Scientifiques de l'École Normale Supérieure*, and the book series *Astérisque*. He is currently an editor for *Tunisian Journal of Mathematics* and a co-director of the Institut Franco Uruguayen de Mathématiques et leurs Interactions (IFUMI, LIA CNRS). Previously he has been the director or president of multiple math institutes and organizations, including the Institut Henri Poincaré, the Institut de Mathématiques de Jussieu-Paris Rive Gache (IMJ-PRG, UMR CNRS 7586), the department of mathematics in Paris 13, the team “Théorie ergodique et systèmes dynamiques” at the Laboratoire de Géométrie et Applications in Paris 13, the team “Analyse Algébrique” at the Institut de Mathématiques de Paris, the scientific committee of the program “Etats de la Recherche” of the Société Mathématique de France, and the coordinator of the program SYMPLEXE of the Agence Nationale de la Recherche.