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: May 6, 2021 (Thursday)
Time: 9pm – 10pm (Hong Kong Time)
Zoom Link: https://cuhk.zoom.us/j/98846779826

Remarks on Euler and Navier-Stokes equations
Speaker: Professor Peter Constantin
Princeton University

Abstract: I'll discuss results concerning incompressible fluid equations at high Reynolds numbers: construction of multiscale solutions, inviscid limits, and conditions for the absence of finite time singularities.

Bio: Professor Peter Constantin is a Romanian-American mathematician who is a world leading expert in, among other things, the partial differential equations of fluid dynamics such as Euler equation, Navier-Stokes equation and with turbulence theory. Prof. Constantin studied at the University of Bucharest, where he graduated in 1975 "summa cum laude". In 1985, he emigrated to Israel, where he received his PhD under Prof. Shmuel Agmon at the Hebrew University in 1981. In 1985, he became an assistant professor at the University of Chicago, where he has been a professor since 1988, since 2005 "Louis Block Professor" and from 2009 "Distinguished Service Professor". From 2012, he is "William R. Kenan Jr. Professor" at Princeton University. Among other things, he was a visiting scientist at the Max Planck Institute for Mathematics in Bonn, the IAS and MSRI in the USA, the University of Paris-Sud and IHES, the Ecole normal Superieure, the Mittag-Leffler Institute, the RIMS in Kyoto, the Courant Institute at NYU and the Isaac Newton Institute in Cambridge. From 1986 to 1990, he was a Sloan Research Fellow. In 1994, he was invited speaker at the International Congress of Mathematicians in Zurich. From 1998 to 2004, he was the editor of "Nonlinearity". He is a Fellow of the American Mathematical Society, the American Physical Society, and the SIAM. In 2010, Prof. Constantin was elected to the American Academy of Arts and Sciences.