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Joint Colloquium with IMS

Turbulent Solutions to Quasilinear Wave

Professor Dong Li
The University of Hong Kong

Abstract: We will discuss a number of recent results toward understanding the norm inflation phenomena in the context of quasilinear wave equations. The prototypical example include the two-dimensional quasilinear wave equation with standard null-type conditions which dates back to the breakthrough work of Alinhac in 2001.

Date: 17 February 2023 (Friday)
Venue: Lai Chan Pui Ngong LT (LPN_LT), Y.C. Liang Hall
The Chinese University of Hong Kong, Shatin
Time: 4:00 p.m. – 5:00 p.m.

Bio: Professor Dong Li is a Chair Professor in Department of Mathematics at The University of Hong Kong. He received his PhD from Princeton University in 2006, and then worked as a post-doc fellow at IAS, Princeton for three years. After Princeton, he was a faculty member at University of Iowa, UBC and HKUST. Professor Li was a Chair Professor at SUSTech for two years before joining HKU. His research interests are very broad, including analysis and PDEs, fluid dynamics, mathematical physics as well as numerical analysis and scientific computing. He has made many significant contributions to the fields, including strong ill-posedness of the incompressible Euler equations, Kato-Ponce inequalities with a new fractional Leibniz rule, global well-posedness of hedgehog solutions for a Skyrme model, blow-up for transport equations with nonlocal velocity, and numerical stability of phase field equations and so on. Professor Li has received prestigious honors and awards including Von Neumann Fellowship (2012-13), Coxeter-James Prize (2015), and Charles A. McDowell Award (2016). He was a founding member of the Young Academy of Sciences of Hong Kong and a founding council member of HKSIAM. He has been serving on the editorial board of Dynamics of PDEs, Pure and Applied Functional Analysis and Communications in Mathematical Research.

All are Welcome!