Liu Bie Ju Centre for Mathematical Sciences City University of Hong Kong

Mathematical Analysis and its Applications Colloquium

Organized by Prof. Hui-Hui Dai and Dr. Dan Dai

Threshold Spaces for Incompressible Euler Equations

by

Dr. Dong Li

University of British Columbia, Canada Recipient of the Coxeter-James Prize (2015)

Date : Jun 19, 2015 (Friday) Time : 4:30 pm to 5:30 pm Venue: P4701, Purple Zone, Level 4, Academic 1 (AC1) City University of Hong Kong

ABSTRACT:

The incompressible Euler equations describe the flow of an inviscid, incompressible fluid and have very rich analytic and geometric structures. The pioneering work of Lichtenstein, Gunther in 1940s and Kato-Ponce in 1980s constructed solutions to the incompressible Euler equations in function spaces above a certain regularity threshold. The intensive research in the past several decades showed that the complexity of the threshold cases is deeply connected with the inherent nonlinear and non-local structures in the Euler equations. I will survey some recent developments on these problems.

Light refreshments will be provided outside venue before the colloquium from 4:00 pm to 4:30 pm. Please come and join us!

** **All interested are welcome** ** *For enquiry:* 3442-9816



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