Special CEAFM Seminar: Fall 2015

JOHNS HOPKINS
Center for Environmental
& Applied Fluid Mechanics

Date: **Monday, November 30, 2015** (Special Date)

Time: 11:00 AM

Location: Latrobe Hall 106 (Special Location)

Speaker: **Dr. Yi Li** (University of Sheffield - UK)

Title: ***"Building Turbulence: From Advected Delta-Vee to Constrained MTLM"***

Abstract

Many insights can be learned from building synthetic models for turbulence. Such synthetic models also find many practical applications in large eddy simulations and beyond. In this talk we will start with the advected delta-vee system we derived at Hopkins. We will introduce the generalization of the system to rotating turbulence, the multi-turnover Lagrangian map (MTLM) and the constrained MTLM. We will explain the insights we learn from these synthetic models as well as their applications.

Bio

Upon graduating from the University of Science and Technology of China with a B.S. in Mechanical Engineering, Dr. Li came to Johns Hopkins University in 2002 and completed his Ph.D. in 2007 in the Dept. of Mechanical Engineering, advised by Charles Meneveau. he is currently a lecturer in the School of Mathematics and Statistics with the University of Sheffield in England. Dr. Yi Li's main research interests are in the field of fluid mechanics, in particular turbulence. Topics include fluid flow optimization, simulation and modelling, and the application of signal processing and database techniques in the study of data-intensive fluid mechanics problems.