Lectures on Stochastic Fluid Mechanics

Dr. Wenqing Hu will give a short course about stochastic fluid mechanics and the following topics will be covered: basic existence and uniqueness results for deterministic and stochastic 2–d and 3–d Navier–Stokes equations; existence and uniqueness of invariant measures for 2–d hydrodynamical systems subject to degenerate random forcing; inviscid limit and related problems in turbulence; the 2–d deterministic and stochastic Euler equations and related problems; motion of incompressible ideal fluids from group theoretic and Hamiltonian dynamical point of view.

Dr. Hu currently is a postdoc at the School of Mathematics, University of Minnesota, Twin Cities, working under the supervision of Professor Vladimir Sverak. Dr. Hu completed a Ph.D. in Mathematics at the Department of mathematics, University of Maryland, College Park, under the supervision of Professor Mark Freidlin.

Schedule:
Lecture 1: 7.9 (Thu) 8:30-10:30 a.m.
Lecture 2: 7.10 (Fri) 8:30-10:30 a.m.
Lecture 3: 7.13 (Mon) 8:30-10:30 a.m.
Lecture 4: 7.15 (Wed) 8:30-10:30 a.m.
Lecture 5: 7.17 (Fri) 8:30-11:30 a.m.

Venue:
Room 1114, No.1 Science Building, Peking University

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