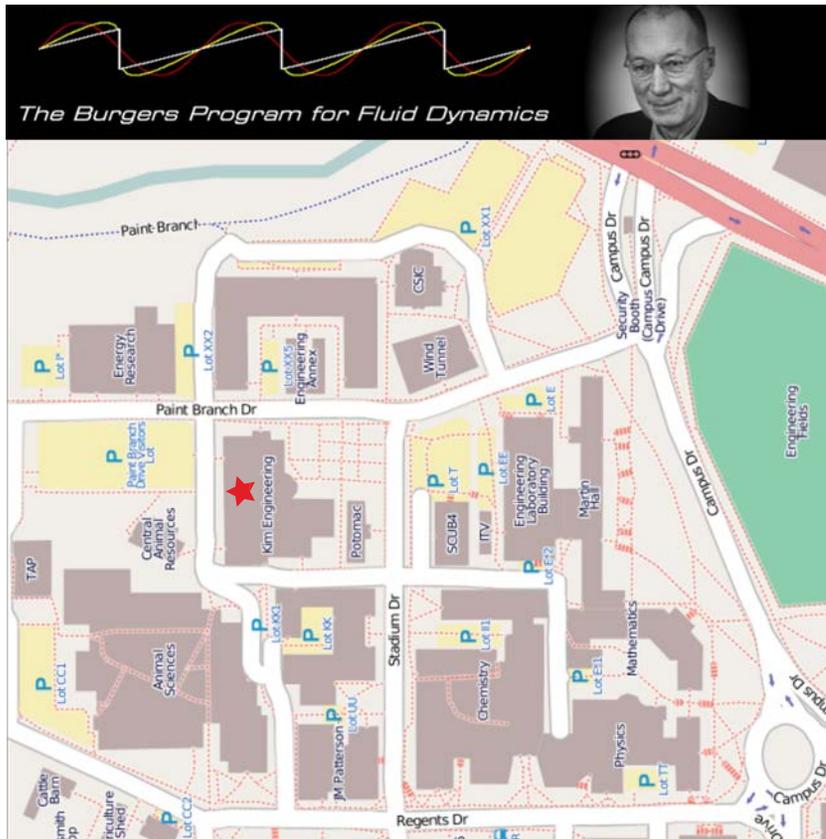


Notes:



Burgers Program for Fluid Dynamics
4211 Computer & Space Sciences Building
University of Maryland, College Park
College Park, MD 20742



2012 Graduate Student/
Post-Doctoral Symposium

Burgers Program for Fluid Dynamics/
University of Maryland, College Park

Center for Environmental and
Applied Fluid Mechanics/
Johns Hopkins University

Department of Mechanical & Aero-
space Engineering/
George Washington University



JOHNS HOPKINS
Center for Environmental
& Applied Fluid Mechanics



THE GEORGE WASHINGTON UNIVERSITY
SCHOOL OF ENGINEERING
AND APPLIED SCIENCE

Tuesday May 22, 2012
Kay Boardroom of the Jeong H. Kim
Building (Rooms 1107 & 1111)
University of Maryland, College Park
College Park, MD 20742

Symposium Schedule

8:45 - 9:15 a.m. Breakfast and welcome - Prof. James M. Wallace, University of Maryland, College Park

9:15 - 10:00 a.m. Keynote Lecture: Prof. Rajat Mittal - The Johns Hopkins University "Understanding the aeromechanics of flapping flight with flexible wings"

Technical Session I

Session Chair: Hantaek Bae

10:00 - 10:20 a.m. Shao-Yiu Hsu: "The effects of contact angle hysteresis on blob mobilization in a pore doublet" (M. Hilpert)

10:20 - 10:40 a.m. Nils Tilton: "Linear stability of gravitationally unstable transient boundary layers in porous media." (A. Riaz)

10:40 - 11:00 a.m. Antonio Posa: "Advisor wall models for immersed boundary methods" (E. Balaras)

11:00 - 11:15 a.m. Coffee Break

Technical Session II

Session Chair: Justin Walker

11:15 - 11:35 a.m. Jorge Bernate: "Vector chromatography of suspended particles in 1D-periodic systems." (G. Drazer)

11:35 - 11:55 a.m. David Meichle: Vortex waves and curious sounds in superfluid helium (D. Lathrop)

11:55 a.m. - 12:15 p.m. Matthieu Andre: "Steep capillary waves and vorticity interaction at a Free Surface" (P. Bardet)

12:15 - 12:35 p.m. Inga Koszalka: "Fates and transformation of the Denmark Strait overflow water from Lagrangian particles in a high resolution ocean model" (T. Haine)

12:35 - 1:30 p.m. Lunch Break

Technical Session III

Session Chair: Christine Ikeda

1:30 - 1:50 p.m. Sébastien Motsch: "Fluid models for self-organized dynamics" (E. Tadmor)

1:50 - 2:10 p.m. Byron Erath: "Normal and pathological laryngeal flows and their impact on voiced speech" (M. Plesniak)

2:10 - 2:30 p.m. Sidharth Talapatra: "Characterization of biophysical interactions in the coastal water column using in situ digital holography." (J. Katz)

2:30 - 2:50 p.m. Stefan Cecelski: "Genesis of Hurricane Julia (2010) from an African Easterly wave and its predictability" (D.-L. Zhang)

2:50 - 3:05 p.m. Afternoon Break

Technical Session IV

Session Chair: Kelley Stewart

3:05 - 3:25 p.m. Claire Verhulst: "POD analysis of kinetic energy entrainment in large wind farms." (C. Meneveau)

3:25 - 3:45 p.m. Manisha Ganeshan: "Role of convective parameterization and urban heat island in warm season precipitation over the Chesapeake Bay watershed" (R. Murtugudde)

3:45 - 4:05 p.m. Vijay Vedula: "Computational modeling and analysis of intraventricular flows in normal and diseased left ventricles." (R. Mittal)

4:05 - 4:25 p.m. Ning Ren: "Large eddy simulation of vertical turbulent wall fires" (A. Trounev)

4:25 - 4:45 p.m. Pranav Joshi: "Effect of mean and fluctuating pressure gradients on the structure of boundary layer turbulence." (J. Katz)

5:00 - 6:00 p.m. Closing Reception

(faculty advisors indicated in parenthesis)