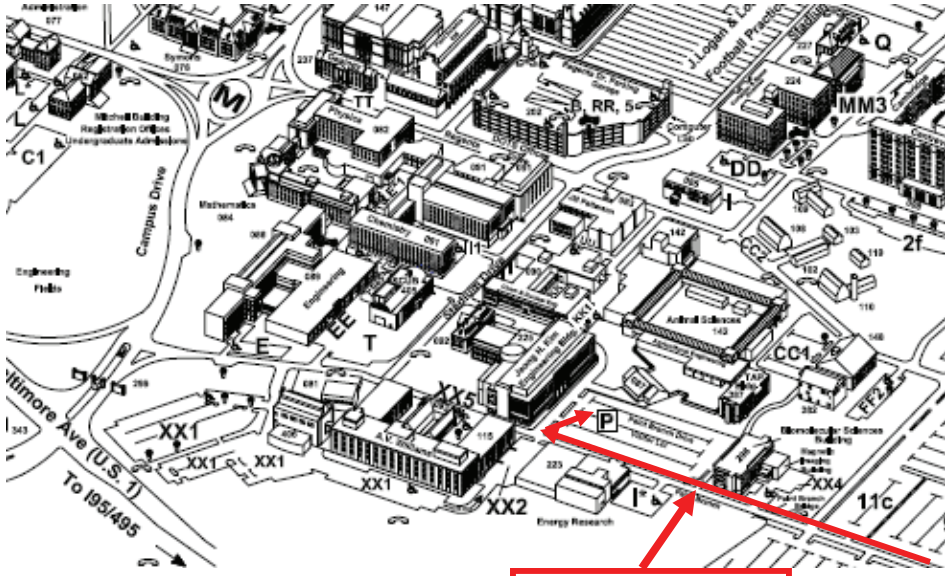
Directions:

From I-95 South:

- Take Route 1 South (Exit 25B). Proceed approximately 1 mile to MD Rt. 193W
- Take Right onto 193W.
- Turn left at the 1st onto Paint Branch Parkway light
- Follow the map below to the Visitor Parking lot on Paint Branch Parkway (behind the Kim Building). An interactive map can be found at http://www.parking.umd.edu/themap



The Burgers Program for Fluid Dynamics

Institute for Physical Science and Technology

Center for Environmental & Applied Fluid Mechanics

2010 Joint Research Symposium on Fluid Dynamics

Friday, May 28, 2010

Rooms 1107 and 1111
Jeong H. Kim
Engineering and Applied Sciences Building

University of Maryland
College Park, MD

You are cordially invited to this one-day event. Graduate students and post-doctoral fellows will be presenting ongoing research in fluid mechanics at Johns Hopkins University and the University of Maryland, College Park.

SYMPOSIUM SCHEDULE

Morning

09:00 **Keynote Lecture: *Prof. Robert Dalrymple***
The Johns Hopkins University
Modeling Free Surface Flows with
a Mesh-Free Method

10:00 Direct Simulation of Turbulence over a Waving Surface – ***Di Yang*** *(Advisor: Lian Shen)*

10:20 Information Propagation and Data Assimilation Localization in a Wave Turbulent Weather Model – ***Young Noh Yoon*** *(Advisor: Ed Ott)*

10:40 Turbulence in the Inner Part of a Turbulent Boundary Layer over a Rough Wall – ***Jiarong Hong*** *(Advisor: Joseph Katz)*

11:00 **Break**

11:15 Laboratory Models of Geophysical and Astrophysical Flows – ***Santiago Triana*** *(Advisor: Dan Lathrop)*

11:35 On the Variability of the East Greenland Spill Jet in Summer 2003 – ***Marcello Magaldi*** *(Advisor: Thomas Haine)*

11:55 The Atmosphere of Mars – ***Steve Greybush*** *(Advisor: Eugenia Kalnay)*

12:15 Trends in Southern Hemisphere Rossby Wave Breaking – ***Thando Ndarana*** *(Advisor: Darren Waugh)*

12:35 **Lunch**

Afternoon

1:30 Direct Numerical Simulations of Soot Emission from Luminous Diffusion Flames – ***Vivien Lecoustre*** *(Advisor: Arnaud Trouve)*

1:50 Cavitation Near Stagnation Points of Blunt Surfaces – ***Yuan Lu*** *(Advisor: Joe Katz)*

2:10 Pressure Waves Generated by the Implosion of Shell Structures in a High-Pressure Water Environment – ***Christine Ikeda*** *(Advisor: Jim Duncan)*

2:30 A Versitile Immersed Boundary Method for Computational Aeroacoustics – **Jung-Hee Seo** (Advisor: Rajat Mittal)

2:50 Direct Numerical Simulations of Shock Wave and Isotropic Turbulence Interactions – ***Nate Grube*** *(Advisor: Pino Martin)*

3:10 **Break**

3:25 A Dynamic Wall Model for LES of Boundary Layer Flow over Multiscale, Fractal-like Surfaces – ***William Anderson*** *(Advisor: Charles Meneveau)*

3:45 The Fluid Dynamics of Mayfly Naiads – ***Khaled Abdelaziz*** *(Advisor: Elias Balaras)*

4:05 High Fidelity Flow-Structure Interaction Modeling of Phonation – ***Xudong Zheng*** *(Advisor: Rajat Mittal)*

4:25 A Comprehensive Investigation of Film-Cooled Surfaces – ***Fernando Raffan*** *(Advisor: Andre Marshall)*

4:45 **Reception**