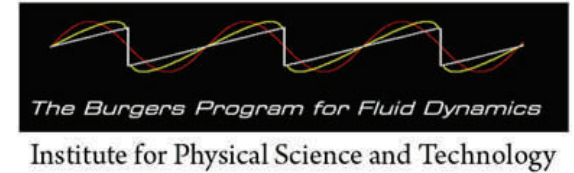
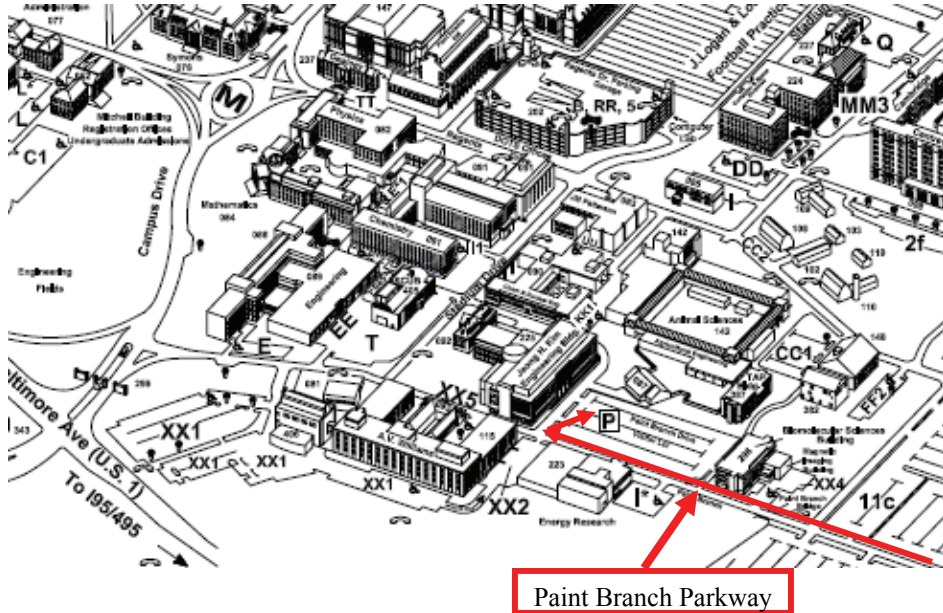


## Directions:

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>



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 Versatile 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**