Fifth International Workshop on Wall-Bounded Turbulent Flows

Inn at The Colonnade, Baltimore, Maryland, USA June 1 - 2, 2008

All our Activities (Except Sunday Reception) are in the DEFENCE/NAIAD Rooms

Registration Fee to Include all Meals Shown Below & Sunday Reception: \$200 Payable in Cash during Registration Only Computer and Transparency Projectors will be available

"L	ong" talks are 20 minutes with 15 minutes of discussion (time slot indicated with underline) 'Short" talks are 15 minutes with 10 minutes discussion	
<u>Friday, May 30:</u>	Accommodation available at Inn at The Colonnade	
<u>Saturday, May 31:</u>	Accommodation available at Inn at The Colonnade Informal Group Dinner for A Special Occasion	18:30-21:00
<u>Sunday, June 1:</u>	Registration	10:00-13:00
Continental Breakfast/Coffee Break		10:30-11:30
Lunch		12:00-13:00
Welcome and Announcements: Hassan Nagib		13:00-13:10
Summary and re-cap of previous workshops (K.R. Sreenivasan & Ivan Marusic)		<u>13:10-13:45</u>
Session 1: Roughne (Co-Chairs: Hassan	ess & ZPG Boundary Layers Nagib, Nick Hutchins)	13:45-17:55
Lex Smits, Princeton University Turbulence measurements in smooth and rough pipes		<u>13:45-14:20</u>
Jason Monty, University of Melbourne High Reynolds number rough-wall boundary layer measurements		
High Reynolds number	er rough-wall boundary layer measurements	14:20-14:45
Sason Monty, Universible High Reynolds number Sean C Bailey, Prince The Azimuthal Struct	er rough-wall boundary layer measurements ton University cure of Turbulence in High Reynolds Number Pipe Flow	14:20-14:45 14:45-15:10
Jason Monty, Univers High Reynolds number Sean C Bailey, Prince The Azimuthal Struct Jonathan Morrison, Ir Effects of very large of	er rough-wall boundary layer measurements ton University sure of Turbulence in High Reynolds Number Pipe Flow mperial College, London roughness in turbulent channel flow	14:20-14:45 14:45-15:10 15:10-15:35
Jason Monty, Univers High Reynolds number Sean C Bailey, Prince The Azimuthal Struct Jonathan Morrison, Ir Effects of very large of Tim Nickels, Cambrid Some comments on t	er rough-wall boundary layer measurements ton University sure of Turbulence in High Reynolds Number Pipe Flow mperial College, London roughness in turbulent channel flow ge University the effects of "small" roughness	14:20-14:45 14:45-15:10 15:10-15:35 15:35-16:00

Coffee Break

Javier Jiménez, Universidad Politecnica, Madrid Results from simulation of an incompressible ZPG boundary layer at $Re_{\theta} = 600$ -	<u>16:30-17:05</u> - <i>2100</i>
Ivan Marusic, University of Melbourne Modelling Large Scale Influences in Near-Wall Turbulence	17:05-17:30
Roddam Narasimha, Jawaharlal Nehru Centre, Bangalore An episodic description of the heat flux processes in atmospheric boundary laye	17:30-17:55 er
Few Slides Contributed by Philippe Spalart, Gary Coleman & Roderick Johnstone (Shown by Hassan Nagib) <i>Direct Numerical Simulation and the Logarithmic Law</i>	e / 17:55-18:00
Reception (Room to be announced)	18:30-21:00
Monday, June 2	
Breakfast	07:00-07:45
Session 2: Pipe & Channel Flows (Co-Chairs: I van Marusic, Sean Bailey)	08:00-12:20
Ron Adrian, Arizona State University Polymeric stresses, wall vortices and drag reduction	<u>08:00-08:35</u>
Tobias Schneider and Bruno Eckhardt Marburg Edge of chaos and the turbulence transition in pipe flow	08:35-09:00
Xiaohua Wu, Royal Military College, Canada & Parviz Moin, Stanford University A direct numerical simulation study on the mean velocity characteristics in turb	09:00-09:25 pulent pipe flow
Hassan Nagib, IIT Variations of von Kármán coefficient in canonical flows	09:25-09:50
Coffee Break	09:50-10:30
Peter Monkewitz, EPFL The Reynolds shear stress in zero pressure gradient boundary layers	<u>10:30-11:05</u>
Nick Hutchins, University of Melbourne 11:05-11:30 Channels, Pipes and Boundary Layers: Similarities and Differences in Large Scale Motions	
K.R. Sreenivasan Boundary layer structure in thermal convection	11:30-11:55
Lunch	12:00-13:30

Session 3: Flow Fundamentals (Co-Chairs: Lex Smits, Min Chong)	13:30-16:15
Joe Klewicki, University of New Hampshire Statistical structure of fluctuating wall pressure and its in-plane gradients at a	<u>13:30-14:05</u> high Re number
Beverley McKeon, Caltech Evidence for a coherent "skeleton" of wall turbulence	14:05-14:30
Bob Moser, University of Texas at Austin Representing anisotropy and inhomogeneity of the two-point correlation tens	14:30-14:55 for in the log-layer
Coffee Break	14:55-15:25
Shiyi Chen, Johns Hopkins A Reynolds Stress Constrained Multiscale Large Eddy Simulation for Wall-Bou	15:25-15:50 Inded Turbulence
Jim Brasseur, Pennsylvania State University Understanding a Fundamental Inaccuracy in Large-eddy Simulation of High R Boundary Layers	15:50-16:15 Deynolds Number
Session 4: Summary and Future Directions (Co-Chairs: K. R. Sreenivasan, Javier Jimenez)	16:15-18:15
Session 1, 2 & 3 Summary and Discussion (30 min. each) Discussion, the INI workshop & Future Directions Closing remarks	16:15-17:45 17:45-18:00 18:00-18:15
Adjourn Workshop	18:15
Informal Groups Dinner	19:00-21:00