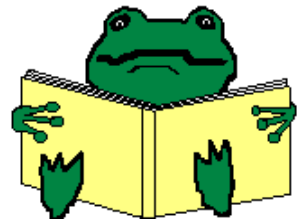


The Fortieth MUFMECH 2013 Schedule

Annual Midwestern Universities Fluid Mechanics Retreat

April 11-13, 2013

Geneva Center, Rochester, Indiana



7:45am, Friday April 12, **BREAKFAST**

Session I, 8:25am-10:10am, Friday, April 12

Chair: J. Foss, KOTGOF: A. Naguib

Talk	Time	Authors	School	Title
0	8:25	P. Merati	WMU	Opening Remarks
1	8:30	H. Nagib	IIT	Nothing is Two-Dimensional
2	8:50	P. Hammer	MSU	An Approach for Correcting the Velocity Bias Error in One-Component Molecular Tagging Velocimetry
3	9:10	K. Pierson, A. Povitsky	UA	Vorticity Confinement Approach for Evaluation of Tip Vortices of Stationary and Rotating Wings
4	9:30	N. Jaffa, S. Morris	ND	Hot-Wire Measurements in High-Speed Turbomachinery Flows
5	9:50	Evan Morrison	PU	Design of a Calibration Facility for 3-D Thermal Anemometry Measurements

10:10-10:30 **COFFEE**

Session II, 10:30am-12:10pm, Friday, April 12

Chair: A. Povitsky, KOTGOF: S. Morris

Talk	Time	Authors	School	Title
1	10:30	M. Rodriguez, E. Johnsen	UM	Shock Propagation in Viscoelastic Media
2	10:50	S. Woodiga and T. Liu	WMU	Skin Friction Topology of Wing-Body Junction Flows
3	11:10	G. Kurup, A. Basu	WS	Tensiophoresis: Sorting Droplets by Size and Composition Using Surfactant Microgradients
4	11:30	S. Adams, T. Conlisk	OSU	Particle and Biological Cell Transport in a Microfluidic Device
5	11:50	K. Bade	MSU	On the Disturbance Induced by an Isolated Roughness Element in a Laminar Boundary Layer

12:10-1:30 **LUNCH** Steering Committee Meeting

Session III, 1:30pm-5:00pm, Friday, April 12

Chair: K. Christensen, KOTGOF: N. Key

Talk	Time	Authors	School	Title
1	1:30	E. Perez, S. Morris	ND	Entropy Generation in Three-Dimensional Boundary Layer Separation
2	1:50	B. Rallabandi, C. Wang, S. Hilgenfeldt	UIUC	Two-Dimensional Streaming Flows Driven by Sessile Microbubbles
3	2:10	T. Kambham, K. Rangharajam, M. Pinti, S. Prakash	OSU	Capillary Flows in Surface Modified Nanochannels
4	2:30	S. Beig, E. Johnsen	UM	Numerical Simulations of Single-Bubble Dynamics
5	2:50	Yang Yang, B. Liou	WMU	Simulation of Hydrodynamic Forces on a Rotating Helical Filament

3:10-5:30 **R and R**
 5:30-6:30 **Dinner**

Session IV, 6:30pm-8:10pm, Friday, April 12

Chair: A. Basu, KOTGOF: S. Wereley

Talk	Time	Authors	School	Title
1	6:30	H. Patel, G. Raman	IIT	Detection Building Air Flow Leakage Using an Acoustic Phased Array
2	6:50	A. Karimi, A Ardekani	ND	Gyrotactic Bioconvection in Density-Stratified Fluids
3	7:10	M. Mikhaylenko, A Povitsky	UA	Boundary Singularity Method for Merging Particles in Fluid
4	7:30	J. Foss	MSU	MUFMECH, In the Beginning.....
5	7:50	R. Wlezien	ISU	MUFMECH 74-A Student Perspective

8:15 **EVENING SOCIAL GATHERING AT BUTLER LODGE**

******Sleep******

7:45am, Saturday, April 13, **BREAKFAST**

Session V, 8:30am-10:10pm, Saturday, April 13

Chair: R. Wlezien, KOTGOF: T. Conlisk

Talk	Time	Authors	School	Title
1	8:30	E. Eagle, S. Morris, M. Wooldridge	UM	High-Speed Imaging of Transient Diesel Sprays During High-Pressure Injection from a Multi-Hole Injector
2	8:50	W. Tian	ISU	Wake Interferences Among Multiple Wind Turbines Sited Over Complex Terrains
3	9:10	K. Heacox, N. Wood, A. Wolsiefer, R. Cohn, S. Williams	UL	AC Electro-hydrodynamics of a nanoneedle
4	9:30	Z. Zaman, P. Umbanhowar, R. Lueptow, J. Ottino	NU	Axial Drift of Granular Flow in Three-Dimensional Tumblers
5	9:50	F. Kazemifar, D. Kyritsis	UIUC	Near-Critical CO ₂ Flow Measurements and Visualization for Carbon Capture and Sequestration

10:10-10:30 **COFFEE**

Session VI, 10:30am-12:10pm, Saturday, April 13

Chair: A. Nagib, KOTGOF: D. Ramo

Talk	Time	Authors	School	Title
1	10:30	A. Doostmohammadi, A. Ardekani	ND	Particle Interaction in Stratified Fluids
2	10:50	B. Johnson	ISU	An Experimental Study on the Film Cooling Effectiveness by Using RSP and PIV Technique
3	11:10	M. Johnson, W. King, R. Ewoldt	UIUC	Effects of Micro-Textured Surfaces in Hydrodynamic Lubrication
4	11:30	D. Qi	WMU	Is Flexibility always favorable for Lift and Power Efficiency
5	11:50	K. Liao, C. Pantano	UIUC	Solution of the Edge Flame Velocity Eigenvalue by a boundary Value Problem Method

12:10-12:15 **CLOSING**

12:15 – 1:00 **LUNCH - Pizza!**