The 32st MUFMECH 2005 Schedule

7:45 BREAKFAST

Session I (Friday Morning, April 8, 2005)
Chairperson: S. Morris KOTGOF: A. Naguib

Talk	Time	Speaker	School	Title
	8:25	S. Stewart	UIUC	Opening Remarks, "The Frog Meeting Rules"
1	8:30	V. Joshi	IIT	Wavelet Representation of Energy Transfer in Turbulent Channel Flow
2	8:50	S. Balachandar	UIUC	Gravity Currents
3	9:10	P. Samothrakis A. Cotel	UM	An experimental study of a gravity current propagating on a slope and impinging on a stratified interface
4	9:30	D. Ackabay W. Schultz D. R. Dowling	UM	Simulating flexible materials in viscous flow
5	9:50	D. Qi	WMU	Dynamic behavior of flexible fibers in a finite Reynolds number flow

10:10 - 10:30 COFFEE

Session II (Friday Morning, April 8, 2005)
Chairperson: G. Raman KOTGOF: S. Wereley

Talk	Time	Speaker	School	Title
6	10:30	P. Slaboch S. Morris	ND	Structure of turbulence near a wall at very high Reynolds number
7	10:50	L. Hudy	MSU	Wall-pressure-based stochastic estimation of a separating/reattaching boundary layer flow field downstream of an axisymmetric backward-facing step
8	11:10	C. Petty	MSU	A New Algebraic Turbulence Closure Model
9	11:30	G. Oweis E. Winkel S. Ceccio D. Dowling	UM	Measurement of a high Reynolds number turbulent boundary layer under drag reduced conditions - Challenges and Solutions
10	11:50	A. Naguib	MSU	On the space-time charactersitics of the wall-pressure field on the floor of a low-speed shallow cavity

12:10 - 1:30 LUNCH Steering Committee Meeting

Session III (Friday Afternoon, April 8, 2005)
Chairperson: W. Liou, KOTGOF: D. Williams

Talk	Time	Speaker	School	Title
11	1:30	M. Miksis	NWU	The dynamics of a rising gas bubble
12	1:50	S. Poussou	PU	Control of a cavitating jet emanating from a nozzle of indeterminate origin
13	2:10	T. Liu	WMU	Optimum Bifurcating-Tube Tree for Gas Transport
14	2:30	S. Chaieb	UIUC	Free Surface deformation and cusp formation in viscous fluid
15	2:50	A. Benard	MSU	Modeling Flow Induced Alignment of Suspensions with a New Closure Mode

3:10 - 5:30 R and R

Posters

Drag Reduction, Rheological Properties and Micelle Microstructures of Cationic Surfactants with Counterion in Water/Co-solvent Systems," by Ying Zhan and Jacques L Zakin, TOSU

Effects of pressure-driven and electrokinetic flow on translocation of microtubules across surfaces by kinesin biomolecular motors, Taesung Kim, UM

The Velocity Field of a Controlled Diffusion Airfoil , D. Neal, MSU

5:30 - 6:30 Dinner

Session IV (Friday Evening, April 8, 2005)
Chairperson: W. Schultz KOTGOF: M. Miksis

Talk	Time	Speaker	School	Title
16	6:30	W. Ge Y. Zhang J. Zakin	TOSU	Zeta Potential Studies of Dilute Cationic Surfactant Drag Reducing Additives
17	6:50	W. Liou	WMU	DSMC simulations of micro Rayleigh-Benard flows
18	7:10	S. Kim	UM	Electrokinetic Protein Concentration Using Temperature Gradient Focusing
19	7:30	H. Tritico A. Cotel	UM	Quantifying and Categorizing Biologically Relevant Turbulence
20	7:50	T. Conlisk	TOSU	Ionic and Biomolecular Transport in Nanofluidic Devices

8:15 EVENING SOCIAL GATHERING AT BUTLER LODGE

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

7:45 **BREAKFAST**

Session V (Saturday Morning, April 9, 2005)
Chairperson: T. Corke KOTGOF: S. Chaieb

Talk	Time	Speaker	School	Title
21	8:30	Y. Zhang W. Ge L. Evrard P. Green B. Chapman J. Zakin	TOSU	Design of a Rotating Disk Apparatus to Screen Drag Reduction Additives
22	8:50	D. Pulla T .Conlisk	TOSU	The Velocity Field Due to a Rotor in Ground Effect
23	9:10	N. Key	PU	A PIV Investigation of Rotor Wake Variability in a Transonic Axial Compressor
24	9:30	F. Shu	PU	Jet control using Indeterminate Origin nozzles",
25	9:50	D. Williams	IIT	Closed-loop Control Architectures in Cavity Control

10:10 - 10:30 COFFEE

Session VI (Saturday Morning, April 9, 2005)
Chairperson: T. Conlisk, KOTGOF: J. Foss

Talk	Time	Speaker	School	Title
26	10:30	E. Matlis	ND	A.C. Plasma Anemometer for Hypersonic Mach Number Experiments
27	10:50	D.Orlov T.Corke	ND	Lumped-Element Circuit Model of the Aerodynamic Plasma Actuator
28	11:10	I. Kuznetzov S. Stewart	UIUC	Multi-scale Modeling of Solid Rocket Motors: Time integration Methods from Computational Aerodynamics Applied to Stable Quasi-Steady Motor Burning
29	11:30	A. Kasimov	UIUC	Quasi-steady curved detonations
30	11:50	J. Powers S. Paolucci	ND	Accurate Length Scale Estimates for Reactive Waves in Hydrocarbon-Air Mixtures

12:10 - 12:15 CLOSING

12:15 – LUNCH

GO HOME! DRIVE SAFE!