

PLENARY SPEAKERS

Grigory Barenblatt

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Incomplete Similarity in Continuum Mechanics

John Hinch

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Collapse of a Column of Grains

Thomas Hou

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The Interplay between Local Geometric Properties and the Global Regularity of the 3D Incompressible Euler Equations

Charles S. Peskin

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Cardiac Mechanics and Electrophysiology by the Immersed Boundary Method

MINISYMPOSIUM SPEAKERS

Triantafyllos R. Akylas

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On Gravity-Capillary Lumps and Related Problems

Nadine Aubry

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Microfluidic Mixing in Channels of Simple Geometry

Neil Balmforth

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Instability in Flow through Elastic Conduits and Volcanic Tremor

Andrew J. Bernoff

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Domain Relaxation in Polymer Langmuir Layers

Jerzy Blawdziewicz

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Stepwise Drainage of Thin Liquid Films Stabilized by Colloidal Particles

Oliver Buhler

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The Likely Shape of Large Waves

Darren Crowdy

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Cusps, Threads, and Steady Pinchoff in Free Surface Stokes Flow

Linda Cummings

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Fluid Flow Problems in Rotating Bioreactors

Robert Ecke

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Experiments in Two-Dimensional Turbulence

A. S. Thanasis Fokas

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On a New Nonlocal Formulation of Water Waves

Don Gaver

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*The Importance of Surfactant Physicochemical Hydrodynamics in Pulmonary
Atelectrauma*

Phillip Hall

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Braided Rivers and Stability Theory

Karl Helfrich

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The Effects of Rotation on Strongly Nonlinear Internal Waves

Diane Henderson

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Stability, Instability, and Stability in Deep-Water Surface Waves

Sam Howison

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Fast Flows of Thin Layers

Huaxiong Huang

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Moisture Transport and Diffusive Instability during Bread Baking

Oliver Jensen

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The Spreading and Stability of a Surfactant-Laden Drop on a Prewetted Substrate.

Chung K. Law

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Experimental Perspectives on the Formulation of Laminar Flame Theory

Jian-Guo Liu

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Stability and Convergence of Efficient Navier-Stokes Solvers via a Commutator Estimate

Paul Milewski

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Stability, Breaking Waves, and Mixing in Stratified Flows

James Quirk

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Document Engineering and Computational Fluid Dynamics

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The Moving Contact Line Problem

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A Model for Macromolecular Transport within Heart Valves

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Detonation Stability and Structure: A New Formulation for Condensed Phase Explosives

Shu-Ming Sun

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2D and 3D Surface Waves in Water with Surface Tension

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Chaotic Advection in Thin Films?

Anna-Karin Tornberg

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Fluid-Structure Interactions: Suspensions of Fibers and Beyond

Jean-Marc Vanden-Broeck

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Gravity Capillary Waves on Electrified Fluid Sheets

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Coarsening Dynamics of Thin Fluid Films

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Thermal Instability in Drawing Viscous Threads

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Free Solid Boundaries in Thermal Convection

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Diffusion and Mixing in Fluid Flow