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**Research Papers:** Fundamental Issues and  
Canonical Flows

## On the Relationships Among Strouhal Number, Pressure Drag, and Separation Pressure for Blocked Bluff-Body Flow

W. W. H. Yeung

*J. Fluids*

*Eng.* 2010;132(2):021201-  
021201-10.  
doi:10.1115/1.4000575.

A. Regev and S. Hassid

*J. Fluids*

*Eng.* 2010;132(2):021202-  
021202-9.  
doi:10.1115/1.4000794.

## On the Streamwise Development of Density Jumps

**Research Papers:** Flows in Complex  
Systems

## A Method to Generate Propulsor Side Forces

Stephen A. Huyer, Amanda Dropkin, James Dick and David Beal

*J. Fluids*

*Eng.* 2010;132(2):021101-  
021101-9.  
doi:10.1115/1.4000745.

## Computational Investigation of a Race Car Wing With Vortex

## Generators in Ground Effect

Yuichi Kuya, Kenji Takeda and Xin Zhang

*J. Fluids*

*Eng.* 2010;132(2):021102-  
021102-8.  
doi:10.1115/1.4000741.

## Comparison of Experiments and Simulation of Joule Heating in

## ac Electrokinetic Chips

Stuart J. Williams, Pramod Chamrathy and Steven T. Wereley

*J. Fluids*

*Eng.* 2010;132(2):021103-  
021103-7.  
doi:10.1115/1.4000740.

## Wave Propagation in Thin- Walled Aortic Analogues

C. G. Giannopapa, J. M. B. Kroot, A. S. Tijsseling, M. C. M. Rutten and F. N. van de Vosse

*J. Fluids*

*Eng.* 2010;132(2):021104-  
021104-6.  
doi:10.1115/1.4000792.

## Large Eddy Simulation of Turbulent Axial Flow Along an

## Array of Rods

F. Abbasian, S. D. Yu and J. Cao

*J. Fluids*

*Eng.*. 2010;132(2):021105-021105-11.  
doi:10.1115/1.4000574.

## A Single-Stage Centripetal Pump—Design Features and an

## Investigation of the Operating Characteristics

Mihael Sekavčnik, Tine Gantar and Mitja Mori

*J. Fluids*

*Eng.*. 2010;132(2):021106-021106-10.  
doi:10.1115/1.4000846.

## Research Papers: Multiphase Flows

## Experimental Study of a

## Cavitating Centrifugal Pump During Fast Startups

S. Duplaa, O. Coutier-Delgosha, A. Dazin, O. Roussette, G. Bois and G. Caignaert

*J. Fluids*

*Eng.*. 2010;132(2):021301-021301-12.  
doi:10.1115/1.4000845.

## Computational and Experimental Studies on Cavity

## Filling Process by Cold Gas Dynamic Spray

Hidemasa Takana, HongYang Li, Kazuhiro Ogawa, Tsunemoto Kuriyagawa and Hideya Nishiyama

*J. Fluids*

*Eng.*. 2010;132(2):021302-021302-9.  
doi:10.1115/1.4000802.

## Thermodynamic Effect on a Cavitating Inducer—Part I:

## Geometrical Similarity of Leading Edge Cavities and Cavitation Instabilities

Jean-Pierre Franc, Guillaume Boitel, Michel Riondet, Éric Janson, Pierre Ramina and Claude Rebattet

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*Eng.*. 2010;132(2):021303-021303-8.  
doi:10.1115/1.4001006.

## Thermodynamic Effect on a Cavitating Inducer—Part II: On-

## Board Measurements of Temperature Depression Within Leading Edge Cavities

Jean-Pierre Franc, Guillaume Boitel, Michel Riondet, Éric Janson, Pierre Ramina and Claude Rebattet

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*Eng.*. 2010;132(2):021304-021304-9.  
doi:10.1115/1.4001007.

## An Experimental Investigation for Bubble Rising in Non-

## Newtonian Fluids and Empirical Correlation of Drag Coefficient

Fan Wenyan, Ma Youguang, Jiang Shaokun, Yang Ke and Li Huaizhi

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*Eng.*. 2010;132(2):021305-021305-7.  
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