Jason Larkin 2610 Larkins Way Rear, Pittsburgh, PA 15203 412-398-8813 jml37@pitt.edu

EDUCATION

University of Pittsburgh, Pittsburgh, PA

M.S. Mechanical Engineering (Expected)

Dissertation: "Experimental Studies in 2-D Turbulence"

University of Pittsburgh, Pittsburgh, PA

B.S. Mechanical Engineering

2007

2009

AWARDS

 Graduate Student Research Grant, University of Pittsburgh Department of Physics 2007 - 2009

TEACHING EXPERIENCE

Lecturer - Physics

2007-2009

Administered informal lectures to undergraduate students, graduate students, and faculty on a broad range of topics ranging from Mathematics, Turbulence, Bio-Physics, Statistical and Thermal Physics and general Nonlinear Phenomena.

RELATED EXPERIENCE

Department of Physics, University of Pittsburgh, Pittsburgh, PA

Graduate Student Researcher

2007 - 2009

Ran multiple experiments with produced 2 papers in submission. Made use of PIV (particle imaging velocimetry) and LDV (laser Doppler velocimetry) equipment to conduct turbulent fluid measurements. Also used photon correlation spectroscopy. Used skills in motion control and programming to assist in experiments.

Department of Mechanical Engineering, University of Pittsburgh, Pittsburgh, PA

Undergraduate Researcher

2006 - 2007

Made use of finite element software to help design a novel flow chamber for studying the initiation and development of cerebral aneurysms.

Precision Therapeutics, Pittsburgh, PA

IT Intern

2006-2007

Assisted with bio-laboratory automation equipment design for novel chemotherapy assay. Equipment included cell imaging microscopy, motion-control, and various programming. Also produced CADD designs for custom parts.

PUBLICATIONS AND PAPERS

- J. Larkin, W. Goldburg, M.M. Bandi, Time-Evolution of the Fractal Distribution of Particle Clusters in Free Surface Turbulence, Physica D, (submitted).
- M.M. Bandi, W. Goldburg, J. Larkin, Statistics of Preferential Particle Concentration in Free-Surface Turbulence, in progress.

PRESENTATIONS

"Statistics of Preferential Particle Concentration in Free-Surface Turbulence"

Mahesh Bandi, Walter Goldburg, Jason Larkin (speaker)

2009 American Physical Society March Meeting Pittsburgh, PA

"Experimental Determination of the von Karman Constant in Turbulent Two Dimensional Soap Film Flows"

Nicholas Guttenberg, Nigel Goldenfeld, Jason Larkin, Alisia Prescott, Hamid Kellay, Walter Goldburg

2008 Meeting of the APS Division of Fluid Dynamics San Antonio, TX

- "Turbulent Dynamics of a Hydraulic Jump in two dimensions: Soap Film Flow"

 Jason Larkin (speaker), Walter Goldburg, Tuan Tran, Pinaki Chakraborty, Gustavo Goia

 2008 Meeting of the APS Division of Fluid Dynamics San Antonio, TX
- "The Generalized Fractal Dimensions of a 2-D Compressible Turbulence"
 Jason Larkin (speaker), Mahesh Bandi, Walter Goldburg
 2007 American Physical Society March Meeting New Orleans, LA
- "Design of a Flow Chamber to Explore the Initiation and Development of Cerebral Aneurysms"
 Jason Larkin, John P. Barrow, A. M. Robertson

2007 Biomedical Engineering Society Meeting Undergraduate Presentation Los Angeles, CA

MEMBERSHIPS

- American Physical Society
- American Society of Mechanical Engineers