

Matthew Mata

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Education

- Ph.D. Student, University of California, Los Angeles (2006-present)
- M.A. Applied Mathematics, California State University, Fullerton (2006)
- B.A. Applied Mathematics, California State University, Fullerton (2004)

Experience

- Intern at NERSC, Oakland Scientific Research Facility (July 2010)
- Research Assistant to Andrea Bertozzi, University of California, Los Angeles (2008-present)
- Teaching Assistant, University of California, Los Angeles (2006-2008)
- Research Assistant to Mortaza Jamshidian, California State University, Fullerton (2005-2006)
- Mathematics Grader, California State University, Fullerton (2003-2004)
- Mathematics Tutor, California State University, Fullerton (2000-2004)

Publications and Preprints

- M. Mata and A. Bertozzi, *A numerical scheme for particle-laden thin film flow in 2-D*. Submitted to the Journal of Computational Physics.
- N. Murisic, J. Ho, V. Hu, P. Latterman, K. Lin, M. Mata, and A. Bertozzi, *Particle-laden viscous thin-film flows on an incline: experiments compared with an equilibrium theory*. Submitted to Physica D.
- N. Grunewald, R. Levy, M. Mata, T. Ward, and A. Bertozzi, *Self-similarity in particle-laden flows at constant volume*, J. Eng. Math., **66**, 53-63, 2010.
- M. Jamshidian and M. Mata, *Post modeling sensitivity analysis to detect the effect of missing data mechanisms*, Multivariate Behavioral Research, **43**, 432-452, 2008.
- M. Jamshidian and M. Mata, *Advances in analysis of mean and covariance structures when data are incomplete*, in Handbook of Latent Variable and Related Models, (S. Y. Lee, Ed.), Chapter 2, 21-44, Elsevier, 2007.

Research Skills

- Knowledge of C++, MATLAB, R, and OpenMP.
- Experience with experiments involving particle-laden flow, including performing experiments and processing images to track the flow front.

Presentations

- M. Mata and A. Bertozzi (2010), *An ADI scheme for particle-laden thin film flow in 2D*. Division of Fluid Dynamics 63rd Annual Meeting, Long Beach, Nov. 21-23, 2010.
- M. Mata and A. Bertozzi (2010), *A numerical scheme for particle-laden thin film flow in 2-D*. SIAM Conference on Parallel Processing for Scientific Computing, Seattle, Feb. 24-26, 2010.
- N. Grunewald, R. Levy, M. Mata, T. Ward, and A. Bertozzi (2009), *Self-similarity in particle-laden flows at constant volume*. Division of Fluid Dynamics 62nd Annual Meeting, Minneapolis, Nov. 22-24, 2009.

Grants, Fellowships, Awards and Honors

- Research Mentorship Fellowship, University of California, Los Angeles (2008-2009)
- Academic Achievement - Graduate (Applied Program) (2006)
- Lisa B. Hromadka Award (2005)
- Graduated Summa Cum Laude, California State University, Fullerton (2004)