Lou Kondic

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ACADEMIC APPOINTMENTS

New Jersey Institute of Technology, Associate Professor	9/02-present
New Jersey Institute of Technology, Assistant Professor	7/99-8/02
Duke University, Research Associate	9/97-7/99
Courant Institute of Mathematical Sciences,	
New York University, Research Associate	9/95-9/97

SHORT-TERM AND NONACADEMIC APPOINTMENTS

The Kavli Institute for Theoretical Physics,

University of California at Santa Barbara, Visiting Scholar01/05-08/07Institute Rudjer Boskovic, Zagreb, Croatia, Research Assistant Scientist03/89-09/89KFA, Jülich, Germany, Visiting Scientist09/88-11/88

EDUCATION _____

The City College of The City University of New York

Ph. D. in Physics, 6/95

• Thesis "Theory of Sonoluminescence"

University of Zagreb, Croatia

B. S. in Physics 6/89 (advisor Prof. Klaus Goeke, KFA, Jülich, Germany)

PAST AND CURRENT STUDENTS AND POST-DOCTORAL ASSOCIATES _____

- 1. Nebojsa Murisic, graduate student, thesis title "Instabilities of Evaporative Thin Liquid Films".
- 2. Tetyana Segin, graduate student, thesis title "Nonlinear Long-wave Interfacial Stability of Two-layer Gas-liquid Flow", (graduated May 2004).
- 3. Oleh Baran, postdoctoral associate, project title "Statistical properties of dense granular materials", (January 2003 - August 2004).

OTHER SELECTED EDUCATION-RELATED ACTIVITIES

1. Grant from the Fulbright Foundation to perform teaching and research in Argentina during Spring semester of 2006.

- 2. Grant from the Council for International Exchange of Scholars/Fulbright Foundation to develop collaborative track of PhD program in Mathematical Sciences with University National del Centro de la Provincias de Buenos Aires, Argentina (with Javier Diez).
- 3. Funded proposals for development of two new undergraduate courses, 2001 and 2003.
- 4. Teaching/research paper presenting experiences from NJIT Capstone course: "Instabilities in the flow of thin liquid films", Kondic, L., *SIAM Review*, **45**, 95-115 (2003).
- 5. Supervised Summer 2004 research program of the Department. Organized a series of research seminars as well as summer-long research projects for ten graduate students.

HONORS _____

- Named Fulbright Scholar for Academic year 2005/06; cited in the NJIT Press Release on Dec. 2, 2005, the web site physorg.com on Dec. 2, 2005, the trade journal "Test and Measurement" on Dec. 7, 2005.
- Invited Plenary talk at the Annual Meeting of Argentinian Physical Society, La Plata, Argentina, 2005.
- Invited Session chair at APS Division of Fluid Dynamics meetings in Chicago, 2005 and Dallas, TX 2002; FACM '05 conference at NJIT, Newark, NJ, 2005; SIAM Annual Meeting, Atlanta, GA, May 1999; Discussion leader at the Gordon conference "Gravitational Effects in Physico-chemical Systems", New London, NH, July 2001.
- Named 'KITP Scholar' by The Kavli Institute for Theoretical Physics, University of California, Santa Barbara, CA (2005 2007).
- Nominated for University Excellence in Teaching Award by the Department of Mathematical Sciences of NJIT (2001, 2002, 2003, 2005).
- Entries in the Citation Index: 250+ (as of January 2005).

PUBLISHED ARTICLES

- 1. Segin, T., Kondic, L., Tilley, B., Long-wave linear stability theory for two-fluid channel flow including compressibility effects, *IMA J. Appl. Math.* to appear (2006).
- 2. Xu, N., O'Hern, C. and Kondic, L., Stabilization of nonlinear velocity profiles in athermal systems undergoing planar shear flow *Phys. Rev. E*, **72** 041504, 1-10 (2005).
- 3. Baran, O., Kondic, L., Velocity profiles, stresses, and Bagnold scaling of sheared granular system in zero gravity, *Phys. Fluids*, **17**, 073304, 1-15 (2005).
- 4. Kondic, L., Diez, J.A., On nontrivial traveling waves in thin film flows including contact lines, *Physica D* **209**, 135-144 (2005) (special issue on Non-linear Dynamics of Thin Films and Fluid Interfaces).

- Segin, T., Tilley, B., Kondic, L., On undercompressive shocks in constrained two-layer flows, *Physica D* 209, 245-259 (2005) (special issue on Non-linear Dynamics of Thin Films and Fluid Interfaces).
- Diez, J, Gonzalez, A. G., Gomba, J., Gratton, R., Kondic, L., Unstable spreading of a fluid filament on a vertical plane: Experiments and simulations, *Physica D* 209, 49-61 (2005) (special issue on Non-linear Dynamics of Thin Films and Fluid Interfaces).
- Kondic, L. Behringer, R. P., Elastic Energy, Fluctuations and Temperature for Granular Materials, Proceedings of the 5th International Conference on Micromechanics of Granular Media, Stuttgart, Germany *Powders and Grains 2005*, ed. R. Garcia-Rojo, H. J. Herrmann, S. McNamara, Balkema Publishers, Leiden, The Netherlands, ISBN 0-415-38347-1, 397-400 (2005).
- Segin, T., Tilley, B., Kondic, L., On flooding and undercompressive shocks in countercurrent two-layer flow, J. Fluid. Mech. 532, 217-242 (2005).
- 9. Xu, N., O'Hern, C., Kondic, L., Velocity Profiles in Repulsive Glassy and Athermal Systems under Shear, *Phys. Rev. Lett.* **94**, 016001 (2005).
- Kondic L., Behringer, R.P., Elastic Energy, Fluctuations and Temperature for Granular Materials, *Europhys. Lett.*, 67, 205-211 (2004).
- 11. Gonzalez, A. G., Diez, J., Gomba, J., Gratton, R., Kondic, L. Spreading of a thin two-dimensional strip of fluid on a vertical plane: Experiments and modeling, *Phys. Rev. E*, **70** 026309 (2004).
- 12. Kondic, L., Diez, J.A., Instabilities in the flow of thin films on inhomogeneous surfaces, *Phys. Fluids*, **16**, 3341-3360 (2004)
- Kondic, L., Behringer, R. P., Extended granular temperature, *Proceedings of the XXI International Congress on Theoretical and Applied Mechanics*, Warsaw, Poland, Proceedings on CD-ROM: ISBN 83-89697-10-1 (2004).
- 14. Kondic, L., Instabilities in the flow of thin liquid films, *SIAM Review*, **45**, 95-115 (2003).
- Gonzalez, A. G., Diez, J., Gomba, J., Gratton, R., Kondic, L., Spreading of thin twodimensional strip of fluid on a vertical plane: Experiments and modeling, *Proceedings of the VIII Meeting on Recent Advances in Physics of Fluids and its Applications*, 18-36 (2003)
- Kondic L., Tennakoon, S.G.K., Painter, B., Hartley, R., Behringer, R.P., Segregation by friction, *Europhys. Lett.*, 61, 742-748 (2003).
- 17. Diez, J.A., Kondic, L., Instabilities in the flow of thin films, *International J. Heat and Technology*, **61**, 31-36 (2003).

- Gomba, J., Gonzalez, A.G., Diez, J.A., Gratton, R., Kondic, L., Instability of the contact line and thickness profiles in vertical oil spreading, *Anales de la Asociacion Fisica Argentina* 14, Asociacion Fisica Argentina (AFA) publishers, 86-91 (2003).
- 19. Kondic, L., Diez, J.A., Flow of thin films on patterned surfaces, *Colloids and Surfaces* A, **214**, 1-11 (2002).
- Diez, J.A., Kondic, L. Simulations of thin liquid films and drops in higher dimensions, J. Comp. Phys., 183, 274-306 (2002).
- Kondic, L., Diez, J.A., Flow of thin films on patterned surfaces: Controlling the instability, *Phys. Rev. E*, 65, 045301 (2002).
- Metcalfe, G., Tennakoon, S.G.K., Kondic, L., Schaeffer, D.G., Behringer, R.P., Granular friction, Coulomb Failure, and Fluid-Solid transition for horizontally shaken granular materials, *Phys. Rev. E*, 65, 031302 (2002).
- 23. Kondic, L, Utter, B., Behringer, R.P., Dynamics of Sheared Granular Materials, Proceedings of the Sixth Microgravity Fluids Physics and Transport Phenomena Conference, 453-475 (2002).
- 24. Kondic, L., Diez, J.A., Pattern formation in gravity driven flow of thin films: Constant flux flow, *Phys. Fluids* **13**, 3168-3184 (2001).
- Fast, P., Kondic, L., Shelley, M.J., Palffy-Muhoray, P., Pattern formation in non-Newtonian Hele-Shaw flow, *Phys. Fluids* 13, 1191-1212 (2001).
- Diez, J.A., Kondic, L., Contact line instabilities of thin liquid films, *Phys. Rev. Lett.* 86, 632-635 (2001).
- 27. Diez, J.A., Kondic, L., Bertozzi, A.L., Global models for moving contact lines, *Phys. Rev. E* 63, 011208 (2001).
- 28. Kondic, L., Diez, J.A., Instabilities in the flow of thin liquid films, *Proceedings of IUTAM Symposium on Free Surface Flows*, eds. A. C. King and Y. D. Shikhmurzaev, Fluid Mechanics and its Applications 62, 161-168 (2001), Kluwer Academic Publishers, Norwell, MA.
- Diez, J.A., Kondic, L., Contact line instabilities in thin films flowing down an incline, Proceedings of the Seventh International Seminar on Recent Advances in Fluid Mechanics, Physics of Fluids and Associated Complex Systems, 1-33, Buenos Aires, Argentina (2001).
- Behringer, R.P., Clément, E., Geng, J., Howell, D., Kondic, L., Metcalfe, G., O'Hern, C., Reydellet, G., Tennakoon, S.G.K., Vanel, L., Veje, C., Science in the Sandbox: Fluctuations, Friction and Instabilities, *Lecture Notes in Physics* Vol. 567, Eds. D. Reguera, L. L. Bonilla, and J. M. Rubi, 351-391, Springer-Verlag, Berlin, 2001.

- Metcalfe, G., Tennakoon, S.G.K., Kondic, L, Schaeffer, D.G., Behringer, R.P., Solid-Liquid Transitions of Horizontally Shaken Dry Granular Materials, *Powders and Grains* 2001, ed. Y Kishino, Balkema, Rotterdam, 513-516 (2001).
- 32. Dan, M., Cheeke, J.D.N., Kondic, L., Dependence of Single Bubble Sonoluminescence on Ambient Pressure, *Ultrasonics* **38**, 566-569 (2000).
- 33. Diez, J.A., Kondic, L., Instability of the contact line in thin film spreading, (Inestabilidades de linea de contacto en flujos de capas delgadas), Anales de la Asociación Fisica Argentina 12, 98-102 (2000), Asociación Fisica Argentina (AFA) publishers (2000).
- Kondic, L., Bertozzi, A.L., Nonlinear dynamics and transient growth of driven contact lines, *Phys. Fluids* 11, 3560-3562 (1999).
- 35. Diez, J.A., Kondic, L., Bertozzi, A.L., A two-dimensional code for thin films, *Proceedings of the Fluid Dynamics Conference of Argentinian Physical Society*, 35-40 (1999).
- Dan, M., Cheeke, J.D.N., Kondic, L., Ambient Pressure Effect on Single Bubble Sonoluminescence, *Phys. Rev. Lett.* 83, 1870-1873 (1999).
- Kondic, L., Dynamics of the particles on a surface: About collision induced sliding and other effects, *Phys. Rev. E* 60, 751-770 (1999).
- Behringer, R.P., Howell, D., Kondic, L., Tennakoon, S.G.K., Veje, C., Predictability and granular materials, *Physica D* 133, 1-17 (1999).
- Tennakoon, S.G.K., Kondic, L., Behringer, R.P., Onset of a flow in horizontally vibrated granular bed: convection by horizontal shearing, *Europhysics Lett.* 45, 470-475 (1999).
- 40. Kondic, L., Bertozzi, A.L., Thin liquid films: Instabilities of driven coating flows on a rough surface, *Dynamics in Small Confining Systems IV*, eds. J. M. Drake, G. S. Grest, J. Klafter, and R. Kopelman, Materials Research Society Proceedings Series 543, 213-218 (1999).
- 41. Kondic, L., Tennakoon, S.G.K., Painter, B., Behringer, R.P., eds. J. M. Drake, G. S. Grest, J. Klafter, and R. Kopelman, Friction-based segregation of 2D granular assembly, *Dynamics in Small Confining Systems IV*, Materials Research Society Proceedings Series 543, 357-362 (1999).
- 42. Kondic, L., Fast, P., Shelley, M.J., About computations of Hele-Shaw flow of non-Newtonian fluids, *Dynamics in Small Confining Systems IV*, eds. J. M. Drake, G. S. Grest, J. Klafter, and R. Kopelman, Materials Research Society Proceedings Series 543, 207-212 (1999).
- 43. Dan, M., Cheeke, J.D.N., Kondic, L., Experimental observation of the effect of ambient pressure on single bubble sonoluminescence, *Proceedings of the Joint Conference of ASA, EAA and DAGA*, Proceedings in CD-ROM: 1PPAD_8, 4 pages (1999).

- 44. Kondic, L., Shelley, M.J., Palffy-Muhoray, P., Non-Newtonian Hele-Shaw flow and the Saffman-Taylor instability, *Phys. Rev. Lett.* **80**, 1433-1436 (1998).
- 45. Behringer, R.P., Howell, D., Kondic, L., Tennakoon, S.G.K., Veje, C., Gravity and granular materials, *Proceedings of The Fourth NASA Microgravity Fluid Physics Transport Phenomena Conference*, 6 pages (1998).
- 46. Kondic, L., Yuan, C., Chan, C.K., About ambient pressure and sonoluminescence, *Phys. Rev. E* 57, 32-35 (1998).
- Kondic L., Palffy-Muhoray, P., Shelley, M.J., Models of Non-Newtonian Hele-Shaw flow, *Phys. Rev. E* 54, 4536-4539 (1996).
- 48. Kondic, L., Gersten, J.I., Yuan, C., Theoretical studies of sonoluminescence radiation: Radiative transfer and parametric dependence, *Phys. Rev. E* **52**, 4976-4990 (1995).

INVITED PRESENTATIONS

- 1. Dense granular systems, IUTAM Symposium on Interactions for Dispersed Systems in Newtonian and Viscoelastic Fluids, Guanajuato, Mexico, March 2006.
- 2. Dense Granular Systems, Courant Institute of Mathematical Sciences, New York University, New York, NY, February 2006.
- 3. On splitting of a liquid strip, UCLA-IPAM-NSF workshop on Thin Films and Fluid Interfaces, Los Angeles, CA, February 2006.
- 4. Dense Granular Systems, Department of Mechanical Engineering, New Jersey Institute of Technology, Newark, NJ, February 2006.
- Dense Granular Systems, Department of Mathematical Sciences, New Jersey Institute of Technology, Newark, NJ, December 2005.
- 6. Thin liquid films: from theory to applications, Annual Meeting of Argentinian Physical Society, La Plata, Argentina, September 2005 (Invited Plenary Talk).
- 7. Instabilities, coalescence and rupture in the flow of thin liquid films, Department of Physics, Twente University, Enschede, The Netherlands, July 2005.
- 8. Temperature for dense granular systems, Granular Physics Workshop, Kavli Institute for Theoretical Physics, UCSB, Santa Barbara, CA, June 2006.
- 9. Thin liquid films with contact lines: instabilities, coalescence and rupture, 1005th Meeting of the American Mathematical Society, Newark, DE, April 2005.
- 10. Instabilities in the flow of thin liquid films, Courant Institute of Mathematical Sciences, New York University, New York, NY, December 2004.

- 11. Dynamics of thin liquid films, International Workshop on Pattern formation through instabilities in thin liquid films: from fundamental aspects to applications, Dresden, Germany, September 2004.
- 12. Extended granular temperature, 21st International Congress on Theoretical and Applied Mechanics, Warsaw, Poland, August 2004.
- 13. Instabilities in the flow of thin liquid films including contact lines, *Frontiers in Applied* and *Computational Mathematics*, Newark, NJ, May 2004.
- 14. Elastic granular temperature, Workshop on Fluctuations and Continuum Equations for Granular Flow, Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, NC, April 2004.
- 15. Flow of thin films on heterogeneous surfaces, *Banff Fluids Workshop*, Banff, Alberta, Canada, December 2003.
- 16. Extended temperature for dense granular materials, *Granular Materials Workshop*, Clark University, Worcester, MA, July 2003.
- 17. Contact line instabilities of thin liquid films, Levich Institute, The City University of New York, New York, NY, May 2003.
- Contact line instabilities of thin liquid films, Department of Mathematics, University of Delaware, Newark, DE, March 2003.
- 19. Dynamics of Sheared Granular Materials, *The Sixth Microgravity Fluids Physics and Transport Phenomena Conference*, Cleveland, OH, August 2002.
- 20. Instabilities, pattern formation, and Topological Changes in Flow of Thin Liquid Films, University National del Centro, Buenos Aires, Argentina, August 2002.
- 21. Instabilities, pattern formation, and Topological Changes in Flow of Thin Liquid Films, University National Del Centro, Tandil, Argentina, August 2002.
- 22. Contact line instabilities of thin films, Department of Applied Physics and Applied Mathematics, Columbia University, New York City, NY, October 2001.
- 23. Thin Film Flows on Heterogeneous Surfaces, Gordon Conference "Gravitational Effects in Physico-chemical Systems", New London, NH July 2001.
- 24. Contact line instabilities of thin liquid films, Department of Physics, Carnegie Mellon University, Pittsburgh, PA, April 2001.
- 25. Contact line instabilities of thin liquid films, Department of Mathematics, North Carolina State University, Raleigh, NC, February 2001.
- 26. Contact line instabilities of thin liquid films, *AiChe 2000 Annual Meeting*, Los Angeles, CA, November 2000.

- 27. Instabilities in the flow of thin liquid films, *IUTAM Symposium on Free Surface Flows*, Birmingham, United Kindgdom, July 2000.
- 28. Pattern formation in the flow of thin liquid films, Department of Mathematical Sciences, New Jersey Institute of Technology, Newark, NJ, June 2000.
- 29. Contact line instabilities of thin liquid films, Department of Mathematics, Boston University, Boston, MA, April 2000.
- Instabilities in the flow of thin liquid films, Department of Mathematics, University of Michigan, Ann Arbor, MI, March 2000.
- 31. Flows of thin films on an imperfect surface, *SIAM Annual Meeting*, Atlanta, GA, May 1999.
- 32. About computations of Hele-Shaw flow of non-Newtonian fluids, Department of Mathematics, Temple University, Philadelphia, PA, March 1999.
- 33. Computing Hele-Shaw flow of non-Newtonian fluids, Department of Mathematics, Southern Methodist University, Dallas, TX, February 1999.
- Computing Sonoluminescence, Device Technology Department, Hewlett-Packard Company, Palo Alto, CA, January 1999.
- 35. Hele-Shaw flow of non-Newtonian fluids, Center for Applied Scientific Computing, Lawrence Livermore National Laboratory, Livermore, CA, January 1999.
- Theory of Sonoluminescence, Department of Mathematical Sciences, New Jersey Institute of Technology, Newark, NJ, January 1999.
- About Ambient Pressure and Single Bubble Sonoluminescence, Department of Aerospace and Mechanical Engineering, Boston University, Boston, MA, December 1998.
- Hele-Shaw flow of non-Newtonian fluids, Department of Mathematics, Worcester Polytechnic University, Worcester, MA, December 1998.
- 39. Pattern formation in the Hele-Shaw flow of non-Newtonian fluids, Department of Mathematics, State University of New York, Buffalo, NY, November 1998.
- 40. Pattern formation in the Hele-Shaw flow of non-Newtonian fluids, Department of Mathematics, North Carolina State University, Raleigh, NC, September 1998.
- 41. Pattern formation in the Hele-Shaw flow of non-Newtonian fluids, Department of Mathematics, Stanford University, Palo Alto, CA, June 1998.
- 42. Ambient Pressure Effect on Single Bubble Sonoluminescence, Department of Physics, Concordia University, Montreal, Canada, April 1998.
- 43. Pattern formation in the Hele-Shaw flow of non-Newtonian fluids, Department of Mathematics, Duke University, Durham, NC, February 1998.

- 44. Ambient Pressure Effect on Single Bubble Sonoluminescence, Center for Nonlinear and Complex Systems, Duke University, Durham, NC, February 1998.
- 45. Effect of ambient pressure on single bubble sonoluminescence, NATO-ASI Workshop on Sonochemistry and Sonoluminescence, Leavenworth, WA, August 1997.
- 46. Computing Hele-Shaw flow of non-Newtonian fluids, Department of Mathematics, Duke University, Durham, NC, March 1997.
- 47. Pattern formation in the Hele-Shaw flow of non-Newtonian fluids, Department of Mathematical Sciences, New Jersey Institute of Technology, Newark, NJ, March 1997.
- 48. Single Bubble Sonoluminescence, Center for Nonlinear Studies, Los Alamos National Laboratory, Los Alamos, NM, December 1996.
- 49. Sonoluminescence: Discussion of some new experimental results, *Third joint meeting* of ASA and ASJ, Honolulu, HA, December 1996.
- 50. Theory of Single Bubble Sonoluminescence, Institute of Physics, Academia Sinica, Taipei, Taiwan, September 1995.
- 51. Theory of Single Bubble Sonoluminescence, Department of Mathematics, Kaochung University, Kaochung, Taiwan, September 1995.
- 52. Single Bubble Sonoluminescence, Courant Institute, New York University, New York, NY, April 1995.
- Single Bubble Sonoluminescence, Institute for Scientific Computing, Lawrence Livermore National Laboratory, Livermore, CA, March 1995.

CONTRIBUTED PAPERS

- 1. Grandjean, H., Tilley, B.S., Hosoi, A.E., Kondic, L., On dimpled thin liquid films, Bull. Amer. Phys. Soc., 50, Chicago, IL, November 2005.
- 2. Kondic, L., On Fluctuations and Signal Propagation in Dense Granular Systems, IPAM Multiscale Analysis and Computation Workshop, Los Angeles, CA, November 2005.
- 3. Kondic, L., Behringer, R. P., Elastic Energy, Fluctuations and Temperature for Granular Materials, Powders and Grains 2005, Stuttgart, Germany, July 2005.
- Kondic L., Thin liquid films with contact lines: instabilities, coalescence and rupture, Frontiers in Applied and Computational Mathematics, NJIT, 14, Newark, NJ, May 2005.
- Kondic, L., Baran, O., Behringer, R. P., Velocity profiles and Stresses of Sheared Granular Systems Under Gravity, Workshop on Granular Materials in Lunar and Martian Exploration, 57, Kennedy Space Center, FL, February 2005.

- Kondic, L., Behringer, R.P., Statistical Approach to dense granular flow, Bull. Amer. Phys. Soc., 49, 171, Seattle, WA, November 2004.
- Segin, T., Kondic L., Tilley B., Long-wave stability of thin liquid films: compressible gas effects, *Bull. Amer. Phys. Soc.*, 49, 149, Seattle, WA, November 2004.
- Baran O., Kondic L., Simulations of sheared granular flow of intermediate volume fraction with realistic boundary conditions, *Bull. Amer. Phys. Soc.*, 49, 158, Seattle, WA, November 2004.
- 9. Kondic, L, Gonzalez, A. G., Diez, J., Gomba, J., and Gratton, R., Spreading of a thin two-dimensional strip of fluid on a vertical plane *International Workshop on Pattern formation through instabilities in thin liquid films: from fundamental aspects to applications*, Dresden, Germany, September 2004.
- 10. Tilley, B, Segin, T., Kondic, L. On stability and undercompressive shocks in gasliquid countercurrent flow in an inclined channel, *Proceedings of the 5th International Conference on Dynamical Systems and Differential Equations*, Ponoma, CA, June 2004.
- Baran, O., Kondic, L. Sheared Granular Systems: Velocity Profiles, Stresses, and Bagnold Scaling, Second New England/New York Granular Materials Workshop, 7, June 2004.
- Kondic, L., Diez, J. A. Instabilities in the flow of thin liquid films including contact lines, Frontiers in Applied and Computational Mathematics, 13, Newark, NJ, May 2004.
- Baran, O., Kondic, L. Sheared Granular Systems: Velocity Profiles, Stresses, and Bagnold Scaling, *Frontiers in Applied and Computational Mathematics*, 26, Newark, NJ, May 2004.
- Segin, T., Tilley, B., Kondic, L. On Undercompressive Shocks in Gas-Liquid Countercurrent Flow in an Inclined Channel, *Frontiers in Applied and Computational Mathematics*, 39, Newark, NJ, May 2004.
- 15. Kondic, L., Behringer, R. P., Extended Granular Temperature, *International Congress* of *Theoretical and Applied Mechanics*, Warsaw, Poland, August 2004.
- 16. Behringer, R.P., Kondic, L., Daniels, K., Utter, B. Statistical Properties of Slowly Sheared Granular Materials *Bull. Amer. Phys. Soc.*, Montreal, Canada, March 2004.
- 17. Kondic, L., Behringer, R.P., Extended Granular Temperature, *Bull. Amer. Phys. Soc.*, **48**, 34 East Rutherford, NJ, November 2003.
- Baran, O., Kondic, L., 3D simulations of sheared granular flow in Couette Geometry, Bull. Amer. Phys. Soc., 48, 102, East Rutherford, NJ, November 2003.
- Segin, T., Kondic, L., Tilley, B.S., Undercompressive shocks in two-layer flows, Bull. Amer. Phys. Soc., 48, 70, East Rutherford, NJ, November 2003.

- Diez, J., Gonzalez, A.G., Gomba, J., Gratton, R., Kondic, L., Contact line instability: Comparison between experiments and numerical simulations, *Bull. Amer. Phys. Soc.*, 48, 70, East Rutherford, NJ, November 2003.
- Gomba, J., Diez, J., Gonzalez, A.G., Gratton, R., Kondic, L., Instability of a contact line: Comparison between experiments and numerical simulations, *Fluidos 2003*, 28, Tandil, Argentina, November 2003.
- Segin, T., Kondic, L., Tilley, B.S., Undercompressive shocks in two-layer flows, *Fluidos 2003*, 20, Tandil, Argentina, November 2003.
- 23. Segin, T., Kondic, L., Tilley, B.S., Flow Interface in An Inclined Channel, *Proceedings* of the SIAM Annual Meeting, 123, Montreal, Canada, June 2003.
- 24. Kondic, L., Matthews, J., Behringer, R.P., Flow of Sheared Granular Materials, *Bull. Amer. Phys. Soc.*, **47**, 22, Dallas, TX, November 2002.
- Diez, J.A., Gomba, J., Gonzalez, A., Gratton, R., Kondic, L., Contact line instability and thickness profiles of spreading films, *Bull. Amer. Phys. Soc.*, 47, 173, Dallas, TX, November 2002.
- Segin, T., Kondic, L., Tilley, B.S., Non-local effects in two-layer flows, Bull. Amer. Phys. Soc., 47, 195, Dallas, TX, November 2002.
- Metcalfe, G., Kondic, L., Tennakoon, S.G.K., Schaeffer, D.G., Behringer, R.P., Initial Fluidization Transition of Horizontally Agitated Granular Beds, *Bull. Amer. Phys.* Soc., 47, 105, Dallas, TX, November 2002.
- Kondic, L, Utter, B., Behringer, R.P., Dynamics of Sheared Granular Materials, Program of the Sixth Microgravity Fluids Physics and Transport Phenomena Conference, p. 47-48, Cleveland, OH, August 2002.
- Kondic, L., Diez, J.A., Coalescence of liquid drops, Proceedings of the SIAM General Meeting, 135, Philadelphia, PA, July 2002.
- Kondic, L., Diez, J.A., Thin film flows on patterned surfaces: Controlling the instability, Bull. Amer. Phys. Soc., 46, 113, San Diego, CA, November 2001.
- Kondic, L., Diez, J.A., Thin film flows on heterogeneous surfaces, First International Workshop on Nanocapilarity and Wetting of Heterogenous Surfaces and Porous Solids, Princeton, NJ, June 2001.
- Metcalfe, G., Tennakoon, S.G.K., Kondic, L., Schaeffer, D.G., Behringer, R.P. Solid-Liquid Transitions of Horizontally Shaken Dry Granular Materials, *Powders and Grains* 2001, Sendai, Japan, May 2001.
- Kondic, L., Diez, J.A., Contact line instabilities of thin liquid films, AiChe 2000 Annual Meeting, Los Angeles, CA, November 2000.

- Kondic, L., Shelley, M.J., Palffy-Muhoray, P., Ennis, R. Pattern Formation in Hele-Shaw Flow of non-Newtonian fluids, *AiChe 2000 Annual Meeting*, Los Angeles, CA, November 2000.
- 35. Tilley, B.S., Kondic, L., Spatial stability of two-layer flows in inclined channels, *Bull. Amer. Phys. Soc.*, **45**, 196, Washington, DC, November 2000.
- 36. Kondic, L., Diez, J.A., Nonlinear dynamics of thin film flows, *International Congress* of Theoretical and Applied Mechanics, Chicago, IL, August 2000.
- 37. Kondic, L., Diez, J.A., Instability in the flow of thin liquid films, *IUTAM Symposium* on Free Surface Flows, Birmingham, United Kindgdom, July 2000.
- 38. Kondic, L., Diez, J.A., Instabilities in the flow of thin liquid films, *Nonlinear Analysis* 2000, New York, NY, June 2000.
- Kondic, L., Diez, J.A., Bertozzi, A.L., Contact line instabilities in the flow of Thin Liquid Films, *Third SIAM Conference on Mathematical Aspects of Materials Science*, Philadelphia, PA, May 2000.
- Shelley, M.J., Fast, P., Kondic, L., Palffy-Muhoray, P., Hele-Shaw flow of Shear-Thinning Fluids, *Third SIAM Conference on Mathematical Aspects of Materials Sci*ence, Philadelphia, PA, May 2000.
- Kondic, L., Diez, J.A., Bertozzi, A.L., About computations of thin films flows, Bull. Amer. Phys. Soc., 44, 2078, New Orleans, LA, November 1999.
- 42. Palffy-Muhoray, P., Ennis, R., Shelley, M.J., Kondic, L., Fingering in Shear Thinning Fluids, *Pattern Formation in Complex Systems*, Bayreuth, Germany, September 1999.
- 43. Kondic, L., Diez, J.A., Bertozzi, A.L., Fingering instability of Thin Liquid Films, Interfaces for the Twenty-First Century, Monterey, CA, August 1999.
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- Kondic, L., Diez, J.A., Bertozzi, A.L., Thin Liquid Films: Flows On an Imperfect Surface, *Fifth SIAM Conference on Applications of Dynamical Systems*, Snowbird, UT, May 1999.
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PAST AND CURRENT SUPPORT

PI	Fulbright Foundation	Dynamics of non-Newtonian liquid films involving contact lines	9/05-8/06
Co-PI	NSF	CCLI - Adaptation and Implementation	9/05 - 8/08
ΡI	NASA	Gravity and Granular Materials: Flight Project	4/04-11/07
Co-PI	CIES	Establishment of Joint PhD Programs	7/04-6/06
Ι	NSF	Major Research Instrumentation	8/04-7/06
ΡI	NASA	Gravity and Granular Materials	3/00-11/03
ΡI	NSF	Instabilities in the flow of thin liquid films	2/02-1/05
Co-PI	NSF	Scientific Computing Research Environments for the Mathematical Sciences (SCREMS)	9/01-8/03

Travel Support: UCLA-IPAM-NSF workshop on Thin Films and Fluid Interfaces, Los Angeles, CA, February 2006, IPAM Multiscale Analysis and Computation Workshop, Los Angeles, CA, November 2005; Argentinian Physical Society Annual Meeting, La Plata, Argentina, September 2005; Granular Workshop, Santa Barbara, CA, May-June 2005; Thin film Workshop, Dresden, Germany, September 2004; ICTAM Meeting, Warsaw, Poland, August 2004; SANSI Workshop, RTP, NC, April 2004; Banff Workshop, Banff, Canada, November 2003; Gordon conference, New London, NH, July 2001; IUTAM Symposium on Free Surface Flows, Birmingham, UK, July 2000; Interfaces for the Twenty-First Century, Monterey, CA, August 1999; XXth International Conference on Stat. Phys., Paris, France, July 1998.

REVIEWER FOR: _

The National Science Foundation; The Department of Energy; The Petroleum Research Foundation; SIAM Journal of Applied Mathematics; Journal of Fluid Mechanics; Physics of Fluids; Physical Review Letters; Europhysics Letters; Physics Letters A; Journal of Physics A: Mathematical and General; Journal of Physics: Condensed Matter; Physica D; European Physical Journal E; Journal of Acoustical American Society; ASME Journal of Fluids Engineering; Journal of Engineering Mathematics; Analysis and Applications; International Journal of Mathematics and Mathematical Sciences; Computers and Fluids; Granular Matter; Mechanics Research Communications; Journal of the Australian Mathematical Society Series B: Applied Mathematics.