MIRON KAUFMAN

Physics Department
Cleveland State University
Cleveland, OH 44115
(216) 687-2436;
e-mail: m.kaufman@csuohio.edu
URL: http://academic.csuohio.edu/mkaufman/

EDUCATION

- B.A. in Physics: 1973, Tel-Aviv University, Ramat Aviv, Israel.
- M.Sc. in Physics: 1977, Tel-Aviv University, Ramat Aviv, Israel.

Thesis: *Topics in the Theory of Superconductivity*; Advisors: G. Deutscher and O. Entin-Wohlman.

- Ph.D. in Physics: 1981, Carnegie-Mellon University.

Thesis: *Tricritical Points and Ising Models on a Hierarchical Lattice;* Advisor: R. B. Griffiths.

POSITIONS HELD

- 1983-1985: Postdoctoral Fellow, MIT; Advisor: A. Nihat Berker
- 1985-1989: Assistant Professor, Cleveland State University.
- 1989- 1995: Associate Professor, Cleveland State University.
- 1995-Present Professor of Physics and Urban Studies, Cleveland State University.
- 2000-2012 Chair Physics Department, Cleveland State University.
- 2000-2014 founding director MS Medical Physics
- 2009-present co-director CSUTeach institute

AWARDS

- Bantrell Fellowship at MIT, 1983-1985
- CSU Distinguished Faculty Award for Research 2007.

VISITING POSITIONS

- ✓ MIT Condensed Matter Theory Group summer research, 1988.
- ✓ NASA-ASEE summer faculty fellowship 1994, 1995, 1996.
- ✓ Tel Aviv University, Israel: November-December 2007.
- ✓ Universite de Cergy-Pontoise, France: September-October 2007; December 2008 – January 2009; December 2009 – January 2010; May 2011; May 2012; May 2013; May 2014; May - July 2015.

TEACHING

- University Physics PHY241/243, 242/244;
- Electricity and Magnetism PHY350;
- Environmental Physics PHY470/570;
- Thermal Physics PHY474;
- Statistical Physics PHY475;
- Monte Carlo Simulations of Complex Systems PHY493/593;
- Computational Physics PHY520.

GRANTS

- **Light Scattering Study of Liquid Mixtures** (with T. Taylor); funded by the Ohio Board of Regents through a Research Challenge Grant, 1987.
- **High Temperature Superconductivity** (with P. D. Hambourger, S. N. Tewari); funded by the Ohio Board of Regents through a Research Challenge Grant, 1988-9.
- **Thermal Properties of Pressurized Materials;** funded by NASA, 1988-89.
- **Computational Technology for the Quantitative Methods** (with W.Bowen); funded by CSU's Dean's Grants for Technology Innovation in Instruction program, 1996.
- **Applications of Monte Carlo Techniques in Mathematics, Sciences and Economics** (with C.Adler, J.Oprea, J.Walsh); funded by CSU's Dean's Grants for Technology Innovation in Instruction program, 1996.
- **Development of Teaching Materials Using Computer Technology**; funded by CSU's Center for Teaching Excellence through a Teaching Enhancement Award, 1997.
- **Age Differences in Episodic and Semantic Memory;** (with Phil Allen) funded by NIH 1997-1999.
- **Faculty Development Award;** funded by CSU 1998.
- **Alzheimer Disease and Entropy Levels of Information Processes**; (with Phil Allen) funded by NIH through Alzheimer Center CWRU 2000-2001.
- **Complexity Mixing Index Based on Entropy for Polymer Processing Control and Optimization,** funded by NSF through CWRU, 2002-2005.
- **CSUTeach: Preparing a New Generation of Noyce Scholars,** (with J. Goodell) funded by NSF $900,000, 2009-2015.
- **MRI: Acquisition of a field emission scanning electron microscope for multidisciplinary nanotechnology research**, (with P. S. Fodor) funded by NSF 2011-2015, $472,115.
- **MRI: Acquisition of a 4G/LTE Wireless Communications Test Set,** (with Ye Zhu) funded by NSF 2013-2017, $270,000.

PUBLICATIONS (refereed) (referenced 1800 times; Hirsch index 24)

1. **Electronic Spin Susceptibility of a Superconducting Alloy Containing Magnetic Impurities.** M. Kaufman, O. Entin-Wohlman, Physica B 84, 77-89 (1976).
2. **Landau-Ginzburg Equation for a Superconductor Containing Magnetically Ordered Impurities.** M. Kaufman, O. Entin-Wohlman, Physica B 84, 90-101 (1976).
3. **Thermodynamic Model and Sum Rules for Three-Phase Coexistence near a Tricritical Point in a Liquid Mixture.** M. Kaufman, K. K. Bardhan, R. B. Griffiths, Phys. Rev. Lett. 44, 77-80 (1980).
4. **Three-Component Model for Tricritical Points: A Renormalization-Group Study. Two Dimensions.** M. Kaufman, R. B. Griffiths, J. M. Yeomans, M. E. Fisher, Phys. Rev. B 23, 3448-3459 (1981).
5. **Exactly Soluble Ising Models on Hierarchical Lattices.** M. Kaufman, R. B. Griffiths, Phys. Rev. B 24, 496-498 (1981), Rapid Communication.
6. **Thermodynamic Model for Tricritical Mixtures with Application to Ammonium Sulfate + Water + Ethanol + Benzene.** M. Kaufman, R. B. Griffiths, J. Chem. Phys. 76, 1508-1524 (1982).
7. **Infinite Susceptibility at High Temperatures in the Migdal-Kadanoff Scheme.** M. Kaufman, R. B. Griffiths, J. Phys. A 15, L 239-242 (1982).
8. **Spin Systems on Hierarchical Lattices: Introduction and Thermodynamic Limit.** R. B. Griffiths, M. Kaufman, Phys. Rev. B 26, 5022-5032 (1982).

9. **First-Order Transitions in Defect Structures at a Second-Order Critical Point for the Potts Model on Hierarchical Lattices.** M. Kaufman, R. B. Griffiths, Phys. Rev. B 26, 5282-5284 (1982), Rapid Communication.
10. **Convexity of the Free Energy in Some Real Space Renormalization-Group Approximations.** M. Kaufman, R. B. Griffiths, Phys. Rev. B 28, 3864-3865 (1983).
11. **Competing Criticality of Short- and Infinite-Range Interactions on the Cayley Tree.** M. Kardar, M. Kaufman, Phys. Rev. Lett. 51, 1210-1213 (1983).
12. **Realizable Renormalization Group and Finite Size Scaling.** M. Kaufman, K. K. Mon, Phys. Rev. B 29, 1451-1453 (1984).
13. **Short-Range and Infinite-Range Bond Percolation.** M. Kaufman, M. Kardar, Phys. Rev. B 29, 5053-5059 (1984).
14. **Comment on Criticality of the Anisotropic Quantum Heisenberg Model on a Self-Dual Hierarchical Lattice.** M. Kaufman, M. Kardar, Phys. Rev. Lett. 52, 483 (1984).
15. **Critical Amplitude of the Potts Model: Zeroes and Divergences.** M. Kaufman, D. Andelman, Phys. Rev. B 29, 4010-4016 (1984).
16. **Pseudo-Dimensional Variation and Tricriticality of Potts Models by Hierarchical Breaking of Translational Values.** M. Kaufman, M. Kardar, Phys. Rev. B 30, 1609-1611 (1984), Rapid Communication.
17. **Spin Systems on Hierarchical Lattices. II. Some Examples of Soluble Models.** M. Kaufman, R. B. Griffiths, Phys. Rev. B 30, 244-249 (1984).
18. **Duality and Potts Critical Amplitudes on a Class of Hierarchical Lattices.** M. Kaufman, Phys. Rev. B 30, 413-414 (1984).
19. **Comment on Approaches to the Tricritical Point in Quasibinary Fluid Mixtures.** M. Kaufman, R. B. Griffiths, Phys. Rev. Lett. 53, 741 (1984).
20. **Random-Field Critical Behavior and the Ginzburg Criterion.** M. Kaufman, M. Kardar, Phys. Rev. B 31, 2913-2919 (1985).
21. **N-Color Spin Models in the Large N Limit.** M. Kardar, M. Kaufman, Phys. Rev. B 31, 7282-7284 (1985).
22. **Renormalization-Group Analysis of Heat Capacity Critical Amplitudes.** S. I. Chase, M. Kaufman, Phys. Rev. B 33, 239-244 (1986).
23. **Random-Field Critical Behavior.** M. Kaufman, Superlattices and Microstructures, 1, 511-515 (1985).
24. **Comment on the Origin of Nonuniversality in Micellar Solutions.** R. G. Caflisch, M. Kaufman, J. R. Banavar, Phys. Rev. Lett. 56, 2545 (1986).
25. **Multicritical Points in an Ising Random-Field Model.** M. Kaufman, P. E.Klunzinger, A.Khurana, Phys.Rev.B 34, 4766-4770 (1986).
26. **Multicritical Susceptibility Sum Rules.** M. Kaufman, M. Ma, Phys. Rev. A 35, 2369-2372 (1987), Rapid Communication.
27. **Square-Lattice Ising Model in a Weak Uniform Magnetic Field: Renormalization-Group Analysis.** M. Kaufman, Phys. Rev. B 36, 3697-3700 (1987).
28. **Cayley Tree Ising Model with Antiferromagnetic Nearest-Neighbor and Ferromagnetic Equivalent-Neighbor Interactions.** M. Kaufman, M. Kahana, Phys. Rev. B 37, 7638-7642 (1988).
29. **Equilibrium Polymerization on the Equivalent-Neighbor Lattice.** M. Kaufman, Phys. Rev. B 39, 6898-6906 (1989).
30. **Polymerization on the Diamond Hierarchical Lattice: the Migdal-Kadanoff Renormalization-Group Scheme.** M. Kaufman, T. Berger, P. D. Gujrati, and D. Bowman, Phys. Rev. A 41, 4371-4378, (1990).
31. **Blume-Capel Model in a Random Magnetic Field: Mean-Field Theory.** M. Kaufman, M. Kanner, Phys. Rev B 42, 2378-2382 (1990).
32. **Scaling Thermodynamic Model of Type I Superconductors.** M. Kaufman, Physica A 177, 523-529 (1991).

33. **Phase Diagram of the Ising Model on Percolation Clusters.** M. Kaufman and J. E. Touma, Phys. Rev. B 49, 9583-9585 (1994).
34. **Urban Property Values, Percolation Theory and Fractal Geometry**. A. Friederich, S. Kaufman, M. Kaufman, Fractals 2, 469-471 (1994).
35. **Thermodynamic Model for Pressurized Solids.** M. Kaufman and H. Schlosser, J. Phys. Condensed-Matter 7, 2259-2264 (1995).
36. **Monte Carlo Study of the Square-Lattice Annealed Ising Model on Percolating Clusters.** P.D.Scholten, M.Kaufman, Phys.Rev.B 56, 59-62 (1997).
37. **A Molar Entropy Model of Age Differences in Spatial Memory.** P. A. Allen, M. Kaufman, F. Smith, R. E. Propper, Psychology and Aging, 13, 501-518 (1998).
38. **Age Differences in Entropy: Primary versus Secondary Memory**. P. A. Allen, M. Kaufman, F. Smith, R. E. Propper, Experimental Age Research, 24, 307-336, (1998).
39. **Characterization of Distributive Mixing in Polymer Processing Equipment using Renyi Entropies.** W. Wang, I. Manas - Zloczower, M. Kaufman, International Polymer Processing, XVI, 315 - 322 (2001).
40. **Entropic Characterization of Distributive Mixing in Polymer Processing Equipment.** W. Wang, I. Manas-Zloczower, M. Kaufman, American Institute of Chemical Engineers (AIChE) Journal **49**, 1637 (2003).
41. **Immigrant Location Decisions and Outcomes.** S. Kaufman, W. Olson, M. Kaufman, International Journal of Economic Development, **5**, part 3 (2003).
42. **Age Differences in Central (Semantic) and Peripheral Processing: The Importance of Considering Both Response Times and Errors,** P. A. Allen, M. D. Murphy, M. Kaufman, K. E. Groth, and A. Begovic, J Gerontol B Psychol Sci. Soc. Sci. 59, 210-219 (2004).
43. **Index for Simultaneous Dispersive and Distributive Mixing Characterization in Processing Equipment.** K. Alemaskin, I. Manas-Zloczower, M. Kaufman, International Polymer Processing, 19 (4), 327-334 (2004).
44. **Entropic Measures of Mixing Tailored for Various Applications,** K. Alemaskin, M. Camesasca, I. Manas-Zloczower, M. Kaufman, AIP Conf. Proc. 712 (1) 169-173 (2004).
45. **Entropy Time Evolution in a Twin Flight Single Screw Extruder and its Relationship to Chaos**. W. Wang, I. Manas-Zloczower, M. Kaufman, Chemical Engineering Communications, 192 (4), 405-423 (2005).
46. **Influence of Initial Conditions on Distributive Mixing in a Twin Flight Single Screw Extruder.** W. Wang, I. Manas-Zloczower, M. Kaufman, Chemical Engineering Communications 192 (6), 749-757 (2005).
47. **Nonlinear Analysis of Electromiography Time Series as a Diagnostic Tool for Low Back Pain.** P. Sung, U. Zurcher, M. Kaufman, Medical Science Monitor 11 (1) 1-5 (2005).
48. **Influence of Extruder Geometry on Laminar Mixing: Entropic Analysis.** M. Camesasca, I. Manas-Zloczower, M. Kaufman, Plastics, Rubber and Composites: Macromolecular Engineering, 33 (9/10) 372-376 (2005).
49. **Entropic Analysis of Color Homogeneity.** K. Alemaskin, I. Manas-Zloczower, M. Kaufman, Polymer Engineering and Science, 45 (7) 1031-1038 (2005).
50. **Color Mixing in the Metering Zone of a Single Screw Extruder: Numerical Simulations and Experimental Validation.** K. Alemaskin, I. Manas-Zloczower, M. Kaufman, Polymer Engineering and Science, 45 (7), 1011-1020 (2005).
51. **Entropic Characterization of Mixing in Microchannels.** M. Camesasca, I. Manas-Zloczower, M. Kaufman, Journal of Micromechanics and Microengineering, 15, 2038-2044 (2005).
52. **Quantifying Fluid Mixing with the Shannon Entropy.** M. Camesasca, M. Kaufman , I. Manas-Zloczower, Macromolecular Theory and Simulations, 15, 595-607 (2006),featured article
53. **Staggered Passive Micromixers with Fractal Surface Patterning.** M. Camesasca, M.

Kaufman, I. Manas-Zloczower, Journal of Micromechanics and Microengineering, 16, 2298-2311 (2006).

54. **Urban Spatial Structure as Self-Organizing Systems: An Empirical Evaluation of Firm Location Decisions In Cleveland-Akron PMSA, Ohio.** Mukesh Kumar, W. Bowen, M. Kaufman, Annals of Regional Science 41(2), 297-314 (2007).
55. **Analytical Model of Fragmentation in Creeping Flow Based on Bateman Equations.** M. Kaufman, Nanoscale and Microscale Thermophysical Engineering 11, 129-136 (2007).
56. **Comparison of Spectral and Entropic Measures for Surface EMG Time Series: A Pilot Study.** P. S. Sung, U. Zurcher, M. Kaufman, Journal of Rehabilitation Research and Development, 44 (4) 599-609 (2007).
57. **Entropy of Electromyography Time Series.** M. Kaufman, U. Zurcher, P. S. Sung, Physica A 386, 698-707 (2007).
58. **Potts-percolation-Gauss Model of a Solid.** M. Kaufman and H. T. Diep, Journal of Physics: Condensed Matter 20, 075222 (2008).
59. **Gender differences in spectral and entropic measures of erector spinae muscle fatigue.** P. S. Sung, U. Zurcher, M. Kaufman, Journal of Rehabilitation Research and Development, 45, 1431-1439 (2008).
60. **Assessment of mixing in passive microchannels with fractal surface patterning.** P. S. Fodor, M. Itomlenskis, M. Kaufman, The European Physical Journal Applied Physics, 47(3), 31301, (2009).
61. **Extended defects in the Potts-percolation model of a solid: Renormalization group and Monte-Carlo analysis.** H.T. Diep, M. Kaufman, Phys. Rev. E, 80, 031116 (2009).
62. **Reliability difference between spectral and entropic measures of erector spinae muscle fatigability.** P. S. Sung, U. Zurcher, M. Kaufman, Journal of Electromyography and Kinesiology 20, 25–30 (2010).
63. **Preface.** J. O. Indekeu, M. Kaufman, Physica A389 (15) 2865 (2010).
64. **Fluid mechanics in rectangular cavities — analytical model and numerics.** M. Kaufman, P. S. Fodor, Physica A389 (15) 2951-2955 (2010).
65. **Modeling of Agglomerate Dispersion in Single Screw Extruders.** N. Dominguez, M. Camesasca, M. Kaufman, I. Manas-Zloczower, A. Gaspar-Cuhna, J. A. Covas, Intern. Polymer Processing XXV (3), 251-257 (2010).
66. **Dynamics of Filler Size and Spatial Distribution in a Plasticating Single Screw Extruder-Modeling and Experimental Observations.** N. Dominguez, A. Gaspar-Cuhna, J. A. Covas, M. Camesasca, M. Kaufman, I. Manas-Zloczower, Intern. Polymer Processing XXV (3), 188-198 (2010).
67. **Time Evolution of Mixing in the Staggered Herringbone Microchannel.** P. S. Fodor and M. Kaufman, Modern Physics Letters B 25 (12, 13) 1111-1125 (2011).
68. **Radial Motion in a Central Potential for Singular Mass Distributions.** U. Zurcher and M. Kaufman, American Journal of Physics 79(5), 521-526 (2011).
69. **Equation of State from the Potts-Percolation Model of a Solid.** M. Kaufman, H. T. Diep, Phys. Rev. E 84, 051106 (2011).
70. **Moffatt Eddies in the Single Screw Extruder: Numerical and Analytical Study,** P. S. Fodor, M.Kaufman, AIP Conf. Proc. 1664, 050010-1–050010-5.
71. **Two-Group Dynamic Conflict Scenarios: "Toy model" with a Severity Index.** S. Kaufman, M. Kaufman, Negotiation and Conflict Management Research (NCMR) Wiley Journal, 8 (1) 41-55 (2015).

72. **Phase Transition and Surface Sublimation of a Mobile Potts Model.** A Bailly-Reyre, H.T. Diep, M Kaufman, Phys. Rev. E 92, 042160 (2015).

CONFERENCE PROCEEDINGS AND BOOK CHAPTERS:

1. **Statistical Model for Mechanical Failure.** M.Kaufman, J. Ferrante, NASA Tech. Memo. 107112 (1996).
2. **A Polymer Model of the Spatial Patterns of Change in Urban Property Values.** M. Kaufman, S. Kaufman, A. Friederich, pg. 32-37 in "Social and Economic Problems of Urban Transportation Systems", ed. S. A. Vaksman, Ekaterinburg, Russia (2000).
3. **Chaotic Features of Flow in Single Screw Extruders - Relevance to Distributive Mixing,** W. Wang, I. Manas-Zloczower, M. Kaufman, Proceedings of the Eighteenth Annual Meeting of the Polymer Processing Society, PPS-18, Guimaraes, Portugal, (2002).
4. **Characterization of Dynamics of Mixing in Polymer Processing and Its Relationship to Chaos,** W. Wang, I. Manas-Zloczower, M. Kaufman, Proceedings of the NSF Design, Service and Manufacturing Grantees and Research Conference, Birmingham, Al. (2003).
5. **Simultaneous Characterization of Dispersive and Distributive Mixing in a Single Screw Extruder,** K. Alemaskin, I. Manas-Zloczower, M. Kaufman, Proceedings ANTEC2003, the Annual Technical Conference of the Society of Plastics Engineers, Nashville (2003).
6. **Advection and Mixing in a Single-Screw Extruder-An Analytical Model,** M. Kaufman, American Institute of Chemical Engineers Annual Meeting Conference Proceedings, San Francisco (2003).
7. **Statistical Entropy in Mixing Analysis Applied to Polymer Processing,** M. Camesasca, I. Manas -Zloczower, M. Kaufman, Proceedings of the Polymer Processing Society Meeting PPS2004, Akron (2004).
8. **Applications of Entropy to Polymer Processing,** K. Alemaskin, M. Camesasca, I. Manas-Zloczower, M. Kaufman, Proceedings of the NSF Design, Service and Manufacturing Grantees and Research Conference, Dallas (2004).
9. **Entropic Mixing Characterization in a Single Screw Extruder,** K. Alemaskin, M. Camesasca, I. Manas-Zloczower, M. Kaufman, E.K. Kim, M. A. Spalding, W. A. Trumbull, R. D. Swain, Proceedings ANTEC2004, the Annual Technical Conference of the Society of Plastics Engineers, Chicago (2004).
10. **Color Mixing in Extrusion: Simulations and Experimental Validation**, I. Manas-Zloczower, M. Kaufman, K. Alemaskin, M. Camesasca, Proceedings of the NSF Design, Service and Manufacturing Grantees and Research Conference, Scottsdale (2005).
11. **Color Mixing in Single Screw Extruder: Simulation and Experimental Validation,** K. Alemaskin, I. Manas-Zloczower, M. Kaufman, Proceedings ANTEC2005, the Annual Technical Conference of the Society of Plastics Engineers, Boston (2005).
12. **Entropic Analysis of Laminar Mixing in Single Screw Extruders,** M. Camesasca, M. Kaufman, I. Manas-Zloczower, Proceedings of the Twentyfirst Annual Meeting of the Polymer Processing Society, PPS-21, Leipzig, Germany (2005).
13. **Microsystems: Measuring Mixing Efficiency Using Statistical Entropy,** M. Camesasca, M. Kaufman, I. Manas-Zloczower, American Institute of Chemical Engineers Annual Meeting Conference Proceedings, Cincinnati (2005).
14. **Comparison of Power Spectrum Measures To Entropic Measures Of Electromyography Time Series: Diagnostic Tools For Low Back Pain**, P. Sung, U. Zurcher, M. Kaufman,

International Society of Biomechanics XX'th Congress – American Society of Biomechanics 29'th Annual Meeting, Cleveland (2005).

15. **Modeling Agglomerate Dispersion in Single Screw Extruders,** N. Domingues, M. Camesasca, M. Kaufman, I. Manas-Zloczower, A. Gaspar-Cunha, J. A. Covas, Proceedings ANTEC 2006, Proceedings ANTEC2006, the Annual Technical Conference of the Society of Plastics Engineers, Charlotte, (2006).
16. **Microchannel Mixing, Entropy and Multifractals**, M. Kaufman, M. Camesasca, I. Manas-Zloczower, Nanotech 2006, NSTI, Nanotechnology Conference and Trade Show Technical Proceedings, vol.2, 578-580, Boston (2006).
17. **Analytical Model of Dispersion in Microchannel Creeping Flow,** M. Kaufman, Proceedings of the Second International Conference on Transport Phenomena in Micro and NanoDevices, Barga, Italy, June (2006).
18. **A Statistical Physics Approach to Data Assimilation of Time Series,** M. Kaufman, U. Zurcher, P. Sung, Proceedings of the 3rd International Conference on Cybernetics and Information Technologies, Systems and Applications, Orlando, July (2006).
19. **Applications of Statistical Physics to Mixing in Microchannels: Entropy and Multifractals,** M. Kaufman*, M. Camesasca, I. Manas-Zloczower, L. A. Dudik and C. Liu, Proceedings of NATO Advanced Study Institute: Functionalized Nanoscale Materials, Devices and Systems for Chem.-Bio. Sensors, Photonics, and Energy Generation and Storage, Sinaia, Romania, June (2007), Editors: A. Vaseashta, I. Mihailescu. Springer NATO Science for Peace and Security Series Physics and Biophysics.
20. **Entropy and Fractals: A Route to Mixing and Microstructure Analysis in Polymer Processing,** M. Camesasca, I. Manas-Zloczower, M. Kaufman, Proceedings ICIPC (The Rubber and Plastic Institute for Training and Research) Colloquium, Medellin, Columbia, February (2008).
21. **Design of Passive Micromixers using the COMSOL Multiphysics software package**, M. Itomlenskis, P. Fodor, M. Kaufman, Proceedings of COMSOL Conference, Boston (2008).
22. **Numerical and Experimental Study of Agglomerate Dispersion in Polymer Extrusion**, N. Domingues, A. Gaspar-Cunha, J.A. Covas, M. Camesasca, M. Kaufman, I. Manas-Zloczower, ***refereed,*** Proceedings of the Twentyfourth Annual Meeting of the Polymer Processing Society, PPS-24, Salerno, Italy (2008).
23. **Mixing Measures,** I. Manas-Zloczower, M. Kaufman, ***invited*** chapter in *Mixing and Compounding of Polymers: Theory and Practice,* ed. I. Manas-Zloczower, Hanser Verlag, (2009).
24. **Modeling Political Conflict Dynamics In a Two-Party System**, S. Kaufman, M. Kaufman, ***refereed,*** SSRN-id1864151, IACM 24'th Annual Conference, Istanbul, Turkey (2011).
25. **Points-bascule dans la dynamique des conflits,** S. Kaufman, M. Kaufman, ***invited*** chapter in ***Entrer en négociation,*** ed. A. Colson, Larcier, (2011).
26. **Dynamics of a linear polymer in a creeping flow**, P. Bose, P. S. Fodor, M. Kaufman*, ***refereed,*** Proceedings of 3'rd International Conference on Nanotechology: Fundamentals and Applications, Montreal, Quebec, Canada (2012).
27. **Tipping Points in the Dynamics of Peace and War,** S. Kaufman and M. Kaufman, ***invited*** chapter in International Negotiation: Foundations, Models, and Philosophies, editors: A. Colson , D. Druckman, W. Donohue, Republic of Letters Publishing (2013).
28. **Entropic Evaluation of Dean Flow Micromixers,** P. S. Fodor, B. Vyhnalek, and M. Kaufman, Proceedings of COMSOL Conference, Boston (2013).
29. **Krugman Model of Urban Spatial Economy on Networks,** M. Kaufman, S. Kaufman, *refereed,*

Proceedings of the International School and Conference on Network Science, NetSci2015, Zaragoza, Spain, (2015).

30. **Intermediate Scaling in the Entropy of Time Series**, M. Kaufman, *refereed*, Proceedings of the International work-conference on Time Series, ITISE2015, Granada, Spain (2015).

BOOK:

STATISTICAL, FLUID AND BIOLOGICAL PHYSICS PROBLEMS, Editors J. O. Indekeu, M. Kaufman, Elsevier, 2010.