Stephen Eubank

Education

B.A. Physics with Honors, Swarthmore College, 1979
Ph.D. Physics, University of Texas at Austin, 1986
Postdoctoral Fellowship, Fluid Turbulence, La Jolla Institute,1987–1988
Postdoctoral Fellowship, Center for Nonlinear Studies &Theory Division Complex Systems Group, Los Alamos National Lab (LANL), 1988–1991

Experience

2008–present Nonresident Senior Fellow, The Brookings Institution Center on Social and Economic Dynamics
2005–present, Deputy Director, Network Dynamics and Simulation Science Laboratory, Virginia Bioinformatics Institute
2005–present, adjunct Professor of Physics, Virginia Tech
2004–2005, Acting group leader, Basic & Applied Simulation Sciences Group, LANL
1997–2004, Staff member, Basic & Applied Simulation Sciences Group, LANL
1995–1997 Invited Researcher, Interpreting Telecommunication Laboratory, ATR, Kyoto, Japan
1994–1995 Contractor, Transportation Analysis and Simulation System (TRANSIMS) project, LANL
1994–1995 Complex Systems Associate, Biosphere Space Ventures, Tucson, AZ
1991–1994 Co-founder, Prediction Company, Santa Fe, NM

Selected publications

V. S. A. Kumar, J. Chen, B. Lewis, M. V. Marathe, S. Eubank, “Exact Stochastic Simulations of Epidemics on Complex Social Contact Networks”, manuscript in preparation, 2008.

C. Kuhlman, B. Lewis, R. Beckman, S. Eubank, J. Chen, T. Dutta, C. Barrett, A.V V. S. Kumar, M. V. Marathe, “A General Approach to Characterizing Structure in Complex Networks”, manuscript in preparation, 2008.

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Press clippings

“Virginia Tech Is Building an Artificial America in a Supercomputer”, IEEE Spectrum, December, 2008.

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“Containing Flu Hinges on Quick, Sound Plan”, USA Today, Mar 11, 2008

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S. Eubank, "EpiSims", Los Alamos Science 28 (2003) 204.

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“Why Does Traffic Jam?”, Scientific American Frontiers show 904 first broadcast 1999.

ABC Evening News for Friday, “Cutting Edge (Technology: Traffic Simulation)“, Aug 13, 1999.

W. J. Broad, “Defining the New Plowshares Those Old Swords Will Make”, New York Times, Feb 5, 1992

Other Activities

Member of NIH Blue Ribbon Panel for the Risk Assessment of the National Emerging Infectious Diseases Laboratory at Boston University Medical Center
Developer and designer of EpiSims, an open-source epidemiology simulation tool
Co-developer and designer of TRANSIMS transportation system tool adopted by DoT
Organized workshops on modeling, simulation, and networks for NATO, IMA, NIH
Summer school lecturer on nonlinear dynamics at San Jose State University and Ambleside

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