

CURRICULUM VITAE

Daniel W. Chambers

March 2015

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EDUCATION:

- B.S., University of Notre Dame, 1975
- M.A., University of Maryland, 1978
- Ph.D., University of Maryland, 1983

EMPLOYMENT:

- Assistant Professor; Boston College, 1983-1989
- Associate Professor; Boston College, 1989-present

RESEARCH INTERESTS:

- Probability
- Stochastic Processes
- Statistics

PUBLICATIONS:

1. Earthquake Forecasting Using Hidden Markov Models (Daniel W. Chambers, Jenny A. Baglivo, John E. Ebel, Alan A. Kafka); *Pure and Applied Geophysics*, Volume 169, Issue 4, 2012, 625-639; DOI:10.1007/s00024-011-0315-1.
2. Non-Poissonian earthquake clustering and the hidden Markov model as bases for earthquake forecasting in California; (Ebel, J.E., Chambers, D.W., Kafka, A.L, and Baglivo, J.A.), *Seismological Research Letters* Volume 78, Number 1, January/February 2007, pages 57-65.
3. Mixing for stationary processes with finite-order multiple Wiener-Ito integral representation (Slud, E.V. and Chambers, D.W.), *Ergodic Theory and Dynamical Systems*, vol 16, 1996, pages 1087-1100.

4. Mixing for multiple Wiener-Ito integral processes, in *Chaos Expansion, Multiple Wiener-Ito Integrals and Their Applications*, C. Houdre and V. Perez-Abreu Eds., 1994, CRC Press, Boca Raton, FL, pages 223-232.
5. Necessary and sufficient conditions for a second-order Wiener-Ito integral process to be mixing *Stochastic Processes and Their Applications*, vol 45, 1993, pages 183-192.
6. Central limit theorems for nonlinear functionals of a Gaussian process (Chambers, D.W. and Slud, E.V.), *Probability Theory and Related Fields*, vol 80, 1989, pages 323-346.
7. Necessary conditions for nonlinear functionals of Gaussian processes to satisfy central limit theorems (Chambers, D.W., and Slud, E.V.), *Stochastic Processes and Their Applications*, vol 32, No. 1, 1989, pages 93-107.
8. Complementary vs. contrastive classification in preschool children (Waxman, S.R., Chambers, D.W., Yntema, D., and Gelman, R.), *Journal of Experimental Child Psychology*, vol 48, 1989, pages 410-422.
9. A note on estimating pit excavation volume, *The Journal of Surveying Engineering*, vol. 115, No. 4, 1989, pages 390-401.

PRESENTATIONS:

- “Forecasting with hidden Markov models”, Probability and Statistics seminar, UMass Amherst, November 2009.
- “Earthquake Forecasting- a Statistical Approach”, Weston Observatory Colloquium Series presentation, May 14, 21, 2008.
- “Evaluations of M4 earthquake probability forecasts for California and western Nevada from 2005 to 2008” (John E. Ebel, Daniel W. Chambers;) AGU Fall 2008 meeting, San Francisco. (Did not attend; paper presented by John Ebel.)
- “Short-Term M4+ earthquake forecasts for California and western Nevada based on non-Poissonian temporal earthquake centerlineustering”, (Ebel, J.E., Chambers, D.W., Kafka, A.L, and Baglivo, J.A.); contributed poster to International Association of Seismology and Physics of the Earths Interior General Assembly, Santiago, Chile, October 2-8. (Did not attend; presentation by J. Ebel.)
- “A hidden Markov approach to modeling interevent earthquake times”, contributed poster, American Geophysical Union Annual Meeting, San Francisco, December 2003
- “Boston College Math Case Studies Project”, poster presentation, Center for the Integration of Research, Teaching, and Learning Annual Forum, Madison, Wisconsin, November 2003
- “Estimating rate constants for ion channels”, invited presentation, Cardiology Section, Department of Medicine, University of Wisconsin, Madison, October 1997
- “Mixing for multiple Wiener-Ito integral processes”, invited paper, Workshop on Multiple Wiener-Ito integrals and their Applications, Centro de Investigacion en Matematicas, Guanajuato, Mexico, July 1992
- “Maximum likelihood modelling of the Na⁺ channel”, invited presentation, Cardiac Physiology Laboratory, University of Chicago, June 1992
- “Necessary and sufficient conditions for a second-order Wiener-Ito integral process to be mixing”, invited paper, 864th Meeting of the AMS, South Bend, Indiana, March 1991

- “A martingale approach to central limit theorems for functionals of a Gaussian process”, contributed paper, Joint Statistical Meetings, San Francisco, August 1987
- “Martingale methods in central limit theorems for functionals of a Gaussian process”, invited paper, Colloquium MIT, 1987
- “Central and functional central limit theorems for functionals of a Gaussian process”, invited paper, Colloquium MIT, 1984

GRANT SUPPORT:

- Boston College Teaching, Advising, and Mentoring Grant, 2005; to develop course Probability for Bioinformatics
- Boston College Annual Research Grant, 1987-1988
- Boston College Summer Research Grant, 1984

DEPARTMENTAL, UNIVERSITY, PROFESSIONAL SERVICE:

- Member, Provost’s Advisory Committee, 2013-
- Member, Premed Committee, 2012-
- Member hiring committee (full time non-tenure track position) 2014, 2015 (chair)
- Member (chair) hiring committee (visiting assistant professor positions) 2014
- Reviewer for “Mathematical Reviews” (43 reviews), 1990-
- Pi Mu Epsilon committee (chair) 2010-2011
- Assistant Chair for Undergraduates, 2007-2009, 2013 Spring
- Undergraduate Curriculum Committee, 2007-2009 (Chair), 2011 Fall, 2013-
- Co-prepared students for actuarial exam in probability 1983-2007, 2009-
- Graduate School of Arts and Sciences Academic Integrity Committee, 2002-2007
- Mathematical Association of America Liaison, 1998-2011
- Graduate Program Director, Mathematics Department, 2001-2004
- Faculty Review Panel, 1999-2002, 2013-
- Member, Master’s Programs Task Force, 2001-2002
- Undergraduate Program Director, Mathematics Department, 1998-2001
- Reviewer for numerous probability and statistics textbooks