Victor W. Goodman
Curriculum Vitae

ADDRESS

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DEGREES

Ph.D. in Mathematics	Cornell University, 1970.
B.A. in Mathematics	University of Kansas, 1965.

ACADEMIC POSITIONS

Adjunct Professor of Statistics	Indiana University 2007-present.
Director, Masters Program in Mathematical Finance	Indiana University, 2000-2005
Professor of Mathematic, Emeritus	Indiana University, 2007-present.
Professor of Mathematics	Indiana University, 1991-2007
Visiting Professor	Rensselaer Polytechnic Institute, 1988-89.
Associate Professor	Indiana University, 1979-1990.
Visiting Associate Professor	University of Wisconsin, Madison, 1978-79.
Assistant Professor	Indiana University, 1972-78.
Postdoctoral Fellow	University of New Mexico, 1970-72.

PH.D. DISSERTATION STUDENTS

Siyu Zhang 2008: Pricing Caps and Swaptions When Bond Prices Follow Jump-Diffusion Processes
Chunfeng She 2007: A Mathematical Model for Power Derivatives
Andrew Ellett 2005: Portfolio Management, Optimum Consumption, and Terminal Wealth
Vivek Ranjan 2004: Jump process models for currency exchange rates
Kyounghee Kim 2003: Avoiding interest rate explosions in log normal bond models
Daniell Toth, 2002: Random field models of interest rates
Peter Caithamer, 1997: Self-similar Gaussian chaos processes
Robert Decker, 1986: Propagation of singularities for two-parameter stochastic processes
Chien-Tu Wang, 1985: The Hausdorff dimension of special time sets for Brownian sheets
Anca Ralescu, 1983: General rates of decay for weighted empirical processes
Barry Brunson, 1982: Lattice martingales

TEXTBOOKS

The Mathematics of Finance: Modeling and Hedging, Brooks/Cole Publishing, 2001.
Instructor's Guide, The Mathematics of Finance, Brooks/Cole Publishing, 2001.

RECENT RESEARCH PUBLICATIONS

•Common Forward Rate Volatility, submitted for publication.

•Volatility Models of the Yield Curve , Infinite Dimensional Stochastic Analysis , World Scientific QP-PQ, Vol XXII, 236-244, 2008

• Brownian Super-Exponents, Comm. On Stochastic Analysis 1, no. 1, 141-149, 2007

• One-Factor Term Structure without Forward Rates (with Kyounghee Kim): ArXiv math. PR/0612035

• Exponential Martingales and Time integrals of Brownian Motion (with Kyounghee Kim): ArXiv math. PR/0612034

• Market Price of Risk and Random Field Driven Models of Term Structure, Proceedings of the Winter Conference in Honor of Leonard Gross (with Hassan Allouba), Contemporary Mathematics AMS Publications 2003

• Extending Statistics of Extremes to Distributions Varying in Position and Scale, and Implications for Race Models. Journal of Mathematical Psychology 46, 431-454 (2002)
(with R. Shiffrin, D. Cousineau)

RECENT MATH AND FINANCE TALKS

Implications of Parallel Shifts in the Yield Curve
Purdue University Computational Finance Seminar
April 2009

Volatility Models of the Yield Curve
Combined Meetings of the American Math Society and the American Mathematical Association, Washington D. C. Jan 7, 2009

PCA of Forward Interest Rates
American Mathematical Society Regional Meeting,
Baton Rouge April 2008

1) Term Structure without Forward Rates 2)Brownian Super-Exponents
International Conference on Stochastic Processes and Their Applications,
Champaign-Urbana, Aug 2007

Log Price Bond Volatility
Combined Meetings of the American Math Society and the American Mathematical Association,
New Orleans, Jan 2007

Exponential Martingales and Time Integrals of Brownian Motion
Hawaii International Conference on Statistics, January 2007

PDE Approach to Caps & Swaptions,
Finance Seminar, Mathematics Department, Florida State University Nov 2006

Models of Interest Rate Structure,
American Mathematical Society Regional Meeting
University of Cincinnati, Oct 2006

PROFESSIONAL SERVICE AND MEMBERSHIPS

Organized and developed the Master's Degree Program in Mathematical Finance,
IU Mathematics Department
Organized and often speak at the weekly Seminar in Mathematical Finance,
IU Mathematics Department
Associate Editor, Journal of Statistics and Probability Letters, 1990-2000
Associate Editor, Communications on Stochastic Analysis (2006-present)
Director of Graduate Studies, IU Mathematics Department, 1992–4
Local Organizer, IU and IMS Joint International Conference on Stochastic Processes, March 1992
Director of Undergraduate Studies, IU Mathematics Department, 1983–5