Adina Oprisan

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- EDUCATION

    University of Texas at Arlington - Arlington, Texas
    Ph.D. - Department of Mathematics, July 2009
    Thesis: Large deviation principle for functional limit theorems

    Michigan State University - East Lansing, Michigan
    Master of Science - Department of Statistics and Probability, May 2006

    University of Bucharest - Bucharest, Romania
    Master of Science - Department of Mathematics, June 1998
    Thesis: Local times for Brownian motion on Sierpinski gasket

    University of Bucharest - Bucharest, Romania
    Bachelor of Science - Department of Mathematics, June 1997
    Thesis: Local times for Brownian motion

- PROFESSIONAL EXPERIENCE

    New Mexico State University, Las Cruces, NM
    Assistant Professor - Department of Mathematical Sciences, August 2020 -

    State University of New York at Buffalo, Buffalo, NY
    Affiliated Faculty - School of Management, Department of Finance, August 2017 - May 2020
    Affiliated Faculty - Department of Mathematics, August 2019 - May 2020

    Canisius College, Buffalo, NY
    Assistant Professor - Department of Mathematics and Statistics, September 2015 - May 2020

    Barry University, Miami, FL
    Assistant Professor - Department of Mathematics and Computer Sciences, August 2009 -
    May 2015

    University of Texas at Arlington, Arlington, TX
    GTA - Department of Mathematics, August 2006 - July 2009

    Michigan State University, East Lansing, MI
    GTA - Department of Statistics and Probability, August 2003 - May 2006

    Polytechnic University of Bucharest, Bucharest, Romania
    Lecturer - Department of Mathematics, October 1998 - June 2003

- PUBLICATIONS

A. Oprisan, "Functional limit theorems for a time-changed Wiener process",
in preparation

D. DeBlassie, A. Oprisan and R. Smits, "Brownian Motion with a Singular Drift",
to be submitted

A. Oprisan, "Large deviation principle for additive functionals of semi-Markov processes",
in *Stochastic Analysis and Applications*, 41:2 (2023), 257-275

L. Khinkis, M. Crotzer, A. Oprisan, "Sizing up the regions of unique minima in the least squares nonlinear regression", in *Mathematics for Applications*, Volume 7 (2018), 41-52

A. Oprisan, "An invariance principle for additive functionals of semi-Markov processes", in *Lecture Notes in Computer Science*, Springer, LNCS 10684, (2017), 409-420

A. Oprisan, "Limit theorems for additive functionals of semi-Markov processes", *Proceedings volume of ACMPT 2017 conference - Analytical and Computational Methods in Probability Theory and its Applications, Moscow* , 659-664

A. Oprisan, " An almost sure central limit theorem for autoregressive processes", in *International Journal of Computational and Theoretical Statistics*, Volume 4, Issue 1 (May 2017), 77-82

A. Oprisan and A. Korzeniowski, "Large deviations via almost sure CLT for functionals of Markov processes", in *Stochastic Analysis and Applications*, Volume 30, No 5 (2012), 933-947

A. Oprisan and A. Korzeniowski, "Large deviations application to exit times for switched Markov Processes", in *International Journal of Pure and Applied Mathematics*, Volume 69, No 2 (2011), 137-150

A. Oprisan, "Large deviation principle and applications to exit times" - short paper in the *Proceedings of the International Workshop of Applied Probability, 2010*

A. Oprisan and A. Korzeniowski, "Large deviations for additive functionals of Markov processes", in *International Journal of Pure and Applied Mathematics*, 53 (2009), 441-459

A. Oprisan and A. Korzeniowski, "Large deviation principle for ergodic processes on split spaces", in *Dynamic Systems and Applications* 18 (2009), 589-604

A. Oprisan "Large deviation principle for functional limit theorems", *University of Texas at Arlington*, PhD thesis 2009

A. Dobrescu (Oprisan) and O. Stanasila, "Essential exercises and problems in Advanced Mathematics", in *Printech*, Bucharest, 2003, ISBN 973-652-785-9

A. Dobrescu (Oprisan), "Local times for the Brownian Motion on the Sierpinski Gasket", in *Scientific Bulletin-University Politehnica of Bucharest*, 2001

- TEACHING

New Mexico State University
MATH 1350 - Introduction to Statistics
MATH 1511 - Calculus and Analytic Geometry I
STAT 371 - Statistics for Engineers and Scientists I
STAT 470/515 - Probability: Theory and Applications
STAT 480/525 - Statistics: Theory and Applications
STAT 535 - Elementary Stochastic Processes
STAT 563 - Advanced Topics in Stochastic Processes
STAT 571 - Continuous Multivariate Analysis

State University of New York at Buffalo
MTH 511 - Probability Theory
MGF 634 - Quantitative Methods in Finance

Canisius College
MAT 105 - Finite Mathematics
MAT 111 - Calculus I
MAT 115 - Calculus for Business
MAT 131 - Statistics for Social Sciences
MAT 141 - Inferential Statistics for Science
MAT 191 - Introduction to Discrete Mathematics
MAT 219 - Linear Algebra
MAT 230 - Logic, Sets Theory, and Proofs
MAT 351 - Probability and Statistics I
MAT 352 - Probability and Statistics II
MAT 370 - Topics in Statistics: Probability Models with applications in Finance
DAT 512 - Multivariate Statistical Analysis

Barry University
MAT 109/110 - Precalculus I and II
MAT 152 - Elementary Statistics and Probability
MAT 199 - Current Topics in Science and Mathematics
MAT 203 - Geometry for Teachers
MAT 211 - Calculus I
MAT 214 - Introduction to Financial Mathematics
MAT 230/330 - Statistical Methods I and II
MAT 252 - Statistics for Psychology
MAT 317 - Introduction to Actuarial Mathematics
MAT 332 - Linear Algebra
MAT 359 - Financial Mathematics
MAT 451 /452 - Probability Theory and Mathematical Statistics
MAT 487 - Undergraduate Mathematics Seminar

University of Texas at Arlington
College Algebra
Precalculus II

Michigan State University
Elementary Statistics and Probability

Polytechnic University of Bucharest
Mathematical Analysis
Complex Analysis
Linear Algebra
Probability Theory
Differential Equations
Advanced Mathematics: topics on Fourier and Laplace transforms, differential equations and complex analysis

- ACTIVITIES/TALKS

STATMod 2023 Statistical Modeling with Applications
Bucharest (via zoom) Romania, September 2023
Limit theorems for a time-changed Brownian motion

2023 Conference on Stochastic Analysis, Random Fields and Applications
Michigan State University, August 2023
First passage time for the Brownian motion with a power drift

10th Congress of Romanian Mathematicians, Romania, July 2023
Brownian motion with power law drifts

Spring 2023 Probability Seminar, Louisiana State University, April 17, 2023
On the exit time of the Brownian motion with a power law drift

AMS Spring Southeastern Sectional Meeting, Georgia Tech University, March 2023
On some functional almost sure central limit theorems

SPSR2022,The 23rd Conference of the Romanian Society of Probability and Statistics, Bucharest, November 2022
Large deviations via almost sure central limit theorems

MATH Colloquium, UTEP, October 28 , 2022
Limit theorems related to average and diffusion approximations

STATMod 2022 Statistical Modeling with Applications, Bucharest (via zoom) Romania, October 2022
Almost sure central limit theorems and statistical applications

AMS Fall Central Sectional Meeting, El Paso, September 2022
Special Session: Stochastic Analysis and Applications
Limit theorems for functionals of semi-Markov processes

Spring 2022, Probability Seminar, NMSU
Talks: Introduction to random matrices, Limit theorems on the spectrum of random matrices; Marchenko-Pastur approach to the proof of the semi-circle law; Convergence in expectation to the semicircle law; Hole probability; An introduction to free probability

Fall 2021, Students Seminar, NMSU
Seldom is Meaningful

Modern Stochastic: Theory and Applications-V, Kyiv (via zoom), June 1-4, Session: Stochastic models of evolution systems - dedicated to the main research topics of academician Volodymyr Korolyuk.
Large deviations for additive functionals of semi-Markov processes

Math Colloquium, NMSU, May 7 2021
Average and Diffusion Aproximation Principles

Spring 2021, Probability Seminar, NMSU
Talks: Markov processes - a strong approach; Potential Theory for Markov Processes; Brownian Motion as a strong Markov process

Spring 2021, Statistics Seminar, NMSU
Wishart matrices and the semi-circle law

Fall 2020, Probability Seminar, NMSU
Talks: Weak convergence methods in metric spaces, Kolmogorov construction of Brownian motion, Donsker invariance principle and Wiener measure, Weak convergence on the Skorohod space, Almost sure central limit theorems, Large deviation principle

2019 Joint Mathematics Meetings, Baltimore, January 2019
Invited talk, AMS special session: Orthogonal Polynomials, Quantum Probability, Harmonic and Stochastic Analysis.
Almost sure central limit theorem for additive functionals of semi-Markov processes

Up-Stat 2018, Upstate Chapters of the American Statistical Association Conference, University of Rochester, April 2018
Session chair and judge for student competition

2018 Joint Mathematics Meetings, San Diego, January 2018
AMS special session: Stochastic Processes, Stochastic Optimization and Control, Numerics and Applications.
An almost sure central limit theorem for autoregressive processes

ACMPT-2017 Analytical and Computational Methods in Probability Theory, Moscow University, October 2017, special session: Analytical Methods and Limit Theorems.
Limit theorems for additive functionals of semi-Markov processes

Canisius College, April 26 , 2017
Seminar talk: Weak convergence methods in metric spaces

Up-Stat 2017, Canisius College, April 2016
Co-chair of local organizing committee, session chair and judge for student competition

2017 Joint Mathematics Meetings, Atlanta, January 2017
AMS Contributed paper session, Probability Theory and Stochastic Processes.
An invariance principle for additive functionals of Semi-Markov processes

Up-Stat 2016, Canisius College, April 22-23, 2016
Member of local organizing committee, session chair and judge for student competition

Canisius College, September 23 , 2015
Seminar talk: Brownian Motion: from origin to present developments

AMS 2015 Spring Southeastern Section Meeting, Huntsville, March 2015
Special Session on Stochastic Analysis and Applications.
Large deviations for additive functionals of Markov processes and applications

2015 Joint Mathematics Meetings, San Antonio, January 2015
AMS Contributed paper session, Probability Theory and Stochastic Processes.
Asymptotic results for additive functionals of Semi-Markov processes

2014 Joint Mathematics Meetings, Baltimore, January 2014
AMS Contributed paper session, Probability and Stochastic Dynamical Systems.
On an almost sure functional central limit theorem for Semi-Markov processes

Joint International Meeting of The American Mathematical Society and The Romanian Mathematical Society, Alba Iulia, Romania, June 2013
Special session on Probability and its Relation to Other Fields of Mathematics.
Stochastic additive functionals with applications

2013 Joint Mathematics Meetings, San Diego, January 2013
AMS special session on stochastic analysis of stochastic differential equations and stochastic partial differential equations.
Large deviations via almost sure CLT for functionals of Markov processes

AMS 2012 Spring Southeastern Section Meeting, Tampa, March 2012
Special Session on Stochastic Analysis and Applications.
Large deviation principle for additive functionals of Markov processes

Markov&Semi-Markov&Related Fields, Greece, September 2011
Large deviations from an almost sure central limit theorem for additive functionals of Markov processes

The Fifth International Workshop in Applied Probability, Spain, July 2010
Large deviations and their applications to the problem of exit from a domain

3rd Annual Graduate Student Conference in Probability, North Carolina, May 2009
Large deviation principle for functional almost everywhere central limit theorems of additive functionals

Joint Mathematical Meeting, Washington D.C., January 2009
Large deviation principle for stochastic additive functionals on split spaces

7th AIMS International Conference, Arlington, Texas, May 2008
chair of the contributed session: ODEs and Applications

Mathematical Center of Statistics , Romanian Academy of Sciences, Bucharest, Romania January - June 1999
Seminar talks on Martingales, Stochastic Calculus, Financial Mathematics (Black-Scholes models), Brownian motion on the Sierpinski gasket

- UNDERGRADUATE RESEARCH ADVISING

Honor Thesis Adviser - Canisius College
Noah Gould: Sampling from the Posterior - An Introduction to Sampling Distributions and

Bayesian Inference, 2019

Ignatian Scholarship Day - Canisius College
Dan Foley: A Simple Introduction to Brownian Motion - with applications to quantitative finance, 2016

STEM Research Symposium - Barry University
Leo Lok Hin Law - Mathematical Methods in Risk Theory and Applications to Automobile Liability Insurance, 2014
Legna Rodriguez - Girsanov Theorem and Risk-Neutral Valuation, 2010
Tessa Fredeik - Black Scholes Model and the Feynman-Kac Formula, 2010

- GRADUATE RESEARCH ADVISING

Oral Master Presentation - New Mexico State University

Haneen Alsaoud - Modes of Convergence of Random Variables, Fall 2023
Daniel Hayford - Bayesian Computation and Optimal Inferences, Spring 2023
Richard Antwi - Asymptotics of Maximum Likelihood Estimators, Spring 2023
Benjamin Boakye - Bayesian Inferences, Fall 2021

- SERVICE

NMSU, Department of Mathematical Sciences - Newsletter (with Dr. Smits) Fall 2023

NMSU, Department of Mathematical Sciences - Graduate Committee member for the oral master presentation and oral comprehensive examination

Students: Appiah Prince, Tingting Tong, Xiangfei Chen, Stephen Moylan, Benjamin Boakye, Peter Mensah, Daniel Hayford, Richard Antwi, Natalie Snow, Holly McAlister, Haneen Alsaoud

NMSU, Department of Mathematical Sciences - member hiring committee for Functional Analysis, Fall 2022, and hiring activities: Spring 2022 (topology), Spring 2023 (algebra, functional analysis and math education), Spring 2024 (topology)

AMS Fall Central Sectional Meeting - co-organizer (with Dr. DeBlassie and Dr. Smits)

NSF, panelist, June 2022

NMSU, Department of Mathematical Sciences - Colloquium, co-organizer, Fall 2021, Spring 2022

NMSU, Department of Mathematical Sciences, Undergraduate Curriculum Committee - member, since Fall 2020

NMSU, Department of Mathematical Sciences - Probability Seminar, co-organizer, since Fall 2020

Mathematical Reviews - reviewer, since February 2013 -

ESAIM: Control, Optimisation and Calculus of Variations - reviewer, July 2020

SpringerBriefs in Mathematics series - reviewed the book *Concentration Inequalities for Sums and Martingales*, by Bernard Bercu, Bernard Delyon and Emmanuel Rio, 2015

Journal of Modern and Applied Statistical Methods -reviewer, since September 2016

University of Rochester, **Up-Stat 2018** Conference: Upstate Chapters of the American Statistical Association Conference; session chair and judge for student competition

Canisius College, **Up-Stat 2017** Conference: Upstate Chapters of the American Statistical Association Conference - co-chair of the local organizing committee; session chair and judge for student competition

Canisius College, **Up-Stat 2016** Conference: Upstate Chapters of the American Statistical Association Conference - member of the local organizing committee; session chair and judge for student competition

Canisius College, Department of Mathematics and Statistics - department assessment coordinator, 2016-2019

Canisius College, Faculty-Student Liaison Committee - member, 2015-2016

Chair of the **AMS Section Probability Theory and Stochastic Processes**, Joint Mathematics Meetings, San Antonio, January 2015

Barry M. Goldwater scholarship - faculty representative Barry University, 2010-2015

Faculty Senate Barry University, Ethics Committee - member, 2011-2013

Faculty Senate Barry University , Welfare Committee - member, 2013-2015

Barry University - STEM Research Symposium - committee member, mathematics and computer sciences department representative, 2012-2015

- SKILLS
  Professional software packages for statistics: Minitab, R, SPSS, S-Plus, SAS, Mathematica; TeX typesetting

- AWARDS
  Stephen R. Bernfeld Memorial Scholarship, spring 2007, Department of Mathematics, University of Texas at Arlington

- AFFILIATIONS
  American Mathematical Society

  Romanian Society of Probability and Statistics