

- 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 large deviation principle for a time-changed Brownian motion”, revised manuscript submitted to *Statistics and Probability Letters*

D. DeBlassie, A. Oprisan and R. Smits, “Subexponential estimates for the first hitting time of a Brownian motion with singular drift”, accepted in *Bernoulli*, 2024

A. Oprisan and G. Stoica, “Quadratic variation à la Cameron-Martin”, to appear in Nov. 2025 issue of *The Mathematical Gazette*, London

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

MATH 2530 - Calculus III

MATH 4220/5220 - Fourier Series and Boundary Value Problems

STAT 371 - Statistics for Engineers and Scientists I

STAT 470/515 - Probability: Theory and Applications

STAT 480/525 - Statistics: Theory and Applications

STAT 5310 - Foundations of Probability

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**

**Probability and SPDEs conference at OSU**, Ohio State University, June 3-5, 2025

*The hitting time of zero for a Brownian motion with drift*

**8<sup>th</sup> Stochastic Modeling Techniques and Data Analysis**, Chania, Crete, June 2024

*Functional large deviation principle for a time-changed Wiener process*

**2024 Joint Mathematics Meetings**, San Francisco, January 2024

*Functional limit theorems for a time-changed Brownian motion*

**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 Approximation 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

- **GRADUATE RESEARCH ADVISING**

**Current PhD Students - NMSU**

Sewvandi Adhikari Mudiyanseleg

**Oral Master Presentation - NMSU**

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

- **UNDERGRADUATE RESEARCH ADVISING**

**Undergraduate Research -NMSU**

Current student - Mason Kokovay

**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

- **SERVICE**

**Professional Service:**

– Mathematical Reviews - reviewer since February 2013 , 5-6 papers per year

- Guest Editor, Special Issue "Asymptotic Behavior of Stochastic Partial Differential Equations", Axioms, MDPI, 2025
- ESAIM: Probability and Statistics, reviewer, March 2025
- NSF, panelist, June 2022
- AMS - Fall Central Sectional Meeting 2022 - co-organizer, (with Dr. DeBlassie and Dr. Smits)
- ESAIM: Control, Optimisation and Calculus of Variations , reviewer July 2020
- Journal of Modern and Applied Statistical Methods -reviewer, 2016 -2019
- SpringerBriefs in Mathematics series - reviewed the book *Concentration Inequalities for Sums and Martingales*, by Bernard Bercu, Bernard Delyon and Emmanuel Rio, 2015

#### **Departmental Service: NMSU**

- Department of Mathematical Sciences Newsletter, Fall 2023/Spring 2024 (with Dr. Smits), Fall 2024/Spring 2025 (with Dr. De Chenne)
- Graduate Committee member for the oral master/phd presentation, or 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, Ruwa Abdel Muhsen, Tingting Tong, Huy Ha, Wenyu Si
- Graduate Students Probability Seminar - Spring 2025 (delivered weekly talks for advanced graduate students in probability)
- 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)
- Colloquium, co-organizer, Fall 2021, Spring 2022
- Undergraduate Curriculum Committee - member, Fall 2020-Fall 2024
- Probability Seminar, co-organizer (with Dr. Robert Smits): Fall 2020- Spring 2022

#### **Departmental Service: Canisius College**

- **Up-Stat 2018** Conference: at University of Rochester Upstate Chapters of the American Statistical Association Conference; session chair and judge for student competition
- **Up-Stat 2017** Conference at Canisius College: Upstate Chapters of the American Statistical Association Conference - co-chair of the local organizing committee; session chair and judge for student competition
- **Up-Stat 2016** Conference at Canisius College: Upstate Chapters of the American Statistical Association Conference - member of the local organizing committee; session chair and judge for student competition
- department assessment coordinator, 2016-2019
- Canisius College, Faculty-Student Liaison Committee - member, 2015-2016

#### **Departmental Service: Barry University**



- 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, Ethics Committee - member, 2011-2013
  - Faculty Senate , 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;  $\text{\TeX}$  typesetting
  - AWARDS  
NMSU College of Arts and Sciences, Nominated for Faculty Mentor Award, Spring 2025  
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