SABRINA SIXTA

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EDUCATION

University of Toronto September 2019 - Present
PhD in Statistical Sciences - Supervised by Jeffrey Rosenthal *CGPA: 3.9/4.0*

I am interested in the effect of dimension on Markov chain convergence rates and the one-shot coupling technique.

University of Ottawa September 2010 - April 2015
Joint Honours BSc in Financial Mathematics and Economics *CGPA: 10.0/10.0*

Notable awards: Valedictorian for the Faculty of Science, Faculty Plaque in Mathematics and Statistics

M.I.N.D. High School Graduated June 2010
High School Diploma *CGPA: 94%*

Notable awards: Valedictorian, Bronze Governor General's Academic Medal

PAPERS

- **S. Sixta**, "The Solipsist's First Paper," *a poem accepted in Journal of Humanistic Mathematics* (2022).
- **S. Sixta**, J. S. Rosenthal. "Convergence rate bounds for iterative random functions using one-shot coupling," (2021) *arXiv:2112.03982*.
- M. Evans, M. Liu, M. Moon, **S. Sixta**, S. Wei, S. Yang. "On Some Problems of Confidence Region Construction," (2021) *arXiv:2109.05332*.

TALKS

- Convergence Rate Bounds for Markov Chains Using One-Shot Coupling
  Statistical Society of Canada Annual meeting, SGSU Research Day 2022
- A Convergence Rate Theorem for Random Autoregressive Processes and Extensions to a High Dimensional Example
  Canadian Statistics Student Conference 2021
- Random Functional Autoregressive Processes: a 2021 Convergence Rate Oddyssey
  Stellar Stats Workshop 2021

AWARDS AND HONOURS

NSERC Canada Graduate Scholarships-Doctoral	2023-2026
Ontario Graduate Scholarship	2021-2022
General Motors Women in Science and Mathematics Award	2021
Department of Statistical Sciences Student Leadership Award	2021
NSERC Canadian Graduate Scholarship - Masters	2020-2021

EMPLOYMENT

Bank of Montreal April 2019 - August 2019
Senior Risk Analyst

- Reviewed and sourced errors in the risk factor calculator as part of the Adaptiv Analytics upgrade.

CEM Benchmarking January 2017 - August 2018

Product Solutions Analyst

- Developed in C# the core pension administration calculation engine that took raw data and returned calculated values for use in the report.

Bank of Montreal June 2015 - December 2016

Model Risk Specialist

- Validated regulatory and derivative pricing models in counterparty credit risk to ensure that they were mathematically sound and conformed to regulations.

COMMUNITY

University of Toronto Statistics Graduate Student Union July 2020 - July 2021

President

- First female president since at least 2001.
- Organized the 10th annual Statistics Graduate Student Research Day, which included four presentations by international speakers and eight presentations by students.
- Organized a weekly seminar that included student talks and professional and personal development workshops.
- Launched a pilot peer mentorship program, which connected students during the lockdown.