

Haosui Duanmu

CONTACT INFORMATION

Department of Economics
University of California, Berkeley
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RESEARCH INTERESTS

mathematical statistics, stochastic processes and probability theory, statistical decision theory, nonstandard analysis, point set topology

EMPLOYMENT

University of California, Berkeley, Berkeley, California USA

Postdoctoral Fellow., Department of Economics (March 2018–)

- Advisors: Robert M. Anderson

EDUCATION

University of Toronto, Toronto, Ontario Canada

Ph.d., Department of Statistical Sciences, December 2017

- *Department of Statistical Sciences Doctoral Award*
- Thesis Topic: Applications of Nonstandard Analysis to Markov Processes and Statistical Decision Theory
- Advisors: Jeffrey S. Rosenthal, Daniel M. Roy and William Weiss

M.S., Department of Statistical Sciences, May 2012

B.S., Department of Mathematics, May 2011

- *Graduate with High Distinction*
- Programme: Mathematics and its Application to Finance (specialist)

PUBLICATIONS

Refereed Publications:

1. Haosui Duanmu, Franklin D. Tall, and Lyubomyr Zdomskyy. “Productively Lindelöf and Indestructibly Lindelöf Spaces.” *Topology and its Applications*, 160(18): 2443 (2013)
2. Haosui Duanmu, William Weiss. “Finitely-additive, Countably-additive and Internal Probability Measures.” *Commentationes Mathematicae Universitatis Carolinae*, Vol. 59, No. 4 (2018), pp. 467-485.
3. Haosui Duanmu, Jeffrey S. Rosenthal, and William Weiss “Ergodicity of Markov Processes via Nonstandard Analysis.” *Memoirs of the American Mathematical Society*, Accepted.

Submitted Manuscript

- Haosui Duanmu, Daniel M. Roy. “On Extended Admissible Procedures and their Nonstandard Bayes Risk.” *The Annals of Statistics*, Major Revision.
- Robert M. Anderson, Haosui Duanmu, and Aaron Smith. “Mixing Times and Hitting Times for General Markov Processes.” *Israel Journal of Mathematics*, Submitted.

- Robert M. Anderson, Haosui Duanmu, and Aaron Smith. “Mixing and Average Mixing Times for General Markov Processes.” *Proceedings of the American Mathematical Society*, Submitted.
- Robert M. Anderson, Haosui Duanmu, and Aaron Smith. “Mixing and Hitting Times for Gibbs Samplers and Other Non-Feller Processes.” *Annales de l’Institut Henri Poincaré*, Submitted.

Manuscript in Preparation

- Haosui Duanmu, Daniel M. Roy, and Aaron Smith. “Existence of Matching Priors for Compact Parameter Spaces.” In Preparation.
- Robert M. Anderson, Haosui Duanmu, Daniel M. Roy, and Qiang Sun. “A Non-standard Minimax Theorem.” In Preparation.
- Robert M. Anderson, Haosui Duanmu, Aaron Smith and Jun Yang. “Drift, Minorization and Hitting Times.” In Preparation.

AWARDS

Student Award

- NSERC postdoctoral fellowship (ranked 3 out of 43 applicants in Scholarship and Fellowship Committee for Mathematical Science)
Natural Science and Engineering Research Council of Canada 2019.
- Department Doctoral Award
Department of Statistical Sciences, University of Toronto 2018.
- Coxeter Scholarship for Mathematics
Department of Mathematics, University of Toronto 2010.
- Dean’s List Award
University of Toronto, 2008–2011.

Presentation Award

- Best Student Poster Presentation Award,
University of Toronto Statistical Science Research Day 2017.
- Best Poster of the Statistical Society of Canada Student Conference Award,
Statistical Society of Canada Annual Meeting 2015.
- Probability Section Student Presentation Award,
Statistical Society of Canada Annual Meeting 2015.

PRESENTATIONS

Statistic and Probability Conferences

- The Statistical Society of Canada Annual Meeting, Calgary, AB (May 2019).
- The Statistical Society of Canada Annual Meeting, Montreal, QC (June 2018).
- 5th Bayesian, Fiducial and Frequentist Conference, University of Michigan, Ann Arbor, MI (May 2018).
- Workshop on Stochastic Processes and their Applications, Carleton University, Ottawa, ON, Canada (August 2017).

- 11th Conference on Bayesian Nonparametrics, Paris, France (June 2017).
- 4th Bayesian, Fiducial and Frequentist Conference, Harvard University, Cambridge, MI (May 2017).
- World Congress in Probability and Statistics, University of Toronto, Toronto, ON, Canada (June 2016).
- International Workshop in Applied Probability, University of Toronto, Toronto, ON, Canada (June 2016).
- ISBA World Meeting, Sardinia, Italy (June 2016).
- Statistical Society of Canada Annual Meeting, Brock University, St Catharines, On, Canada (May 2016).
- Objective Bayes Workshop, University of Valencia, Valencia, Spain (June 2015).
- Statistical Society of Canada Annual Meeting, University of Dalhousie, Halifax, NS, Canada (June 2015).

Seminar Talks

- Stanford University, invited by Peter Glynn, Stanford, CA (May 2019).
- University of California, San Diego Probability Seminar, San Diego, CA (Jan 2019).
- University of California, Berkeley Risk Seminar, Berkeley, CA (September 2018).
- The Johns Hopkins University Economic Department Seminar, Baltimore, MD (May 2018).
- University of Ottawa Probability and Statistics Seminar, Ottawa, ON, Canada (February 2017).
- University of California, Berkeley Probability Seminar, Berkeley, CA (February 2017).
- University of Toronto Set Theory Seminar, Toronto, ON, Canada (November 2016).
- University of Toronto Set Theory Seminar, Toronto, ON, Canada (December 2015).