Daniel Andrés Díaz-Pachón

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Education

Biola University — **La Mirada, California**
M.A. New Testament — *2021–*

Universidade de São Paulo — **São Paulo, Brasil**
Ph.D. Probability — *2005–2009*

Universidad Nacional de Colombia — **Bogotá, Colombia**
B.S. Statistics — *1998–2004*
Minor: Mathematics

Facultad de Teología y Estudios Religiosos — **Bogotá, Colombia**
B.A. Theology — *1999–2005*

Ph.D. Thesis

Title: *Some allocation properties for the Poisson point process.*

Supervisor: Serguei Popov.

Description: Percolation and tail bounds for the stable marriage of Poisson and Lebesgue with random appetites.

B.S. Thesis

Title: *Linear hypotheses on means for the strip-split plot design.*

Supervisors: Francisco J. P. Zimmermann and Luis Alberto López.

Description: F and t tests for the eight possible mixed models of the strip-split plot design.

Experience

Academic

Research Assistant Professor — **Miami, Florida**
Division of Biostatistics - University of Miami — *2015–2021*

Postdoctoral Research Associate — **Miami, Florida**
Division of Biostatistics - University of Miami — *2011–2015*

Teaching Assistant — **São Paulo, Brasil**
Instituto de Matemática e Estatística - Universidade de São Paulo — *2007–2007*

Lecturer in Statistics — **Bogotá, Colombia**
Instituto Politécnico Grancolombiano — *2004*

Industry

Risk Analyst — **Bogotá, Colombia**
ACCION International — *2008*

Consultant — **Bogotá, Colombia**
Universidad Nacional de Colombia — *2003*

Edition and translation

Book translator and editor
Freelance — *2004–2013*
More than 30 books translated or edited from English to Spanish for 3 different Publishing Houses (Vida Zondervan, Portavoz, and CLIE).

Consultant — **Bogotá, Colombia**
Universidad Nacional de Colombia — *2003*

Languages

Spanish: Native

English: Fluent

Portuguese: Fluent

Italian: Basic

Greek: Basic

Certifications

- **Curso anual de novela**. Annual course on creative writing. *Escuela Cursiva*.
- **Taller de poesía con Carlos Pardo**. Four-months poetry course. *Escuela Cursiva*.

Interests

Creative writing and poetry.
Crossfit.

Talks and presentations

Active Information and some applications.
Colloquium, Department of Mathematics, Florida International University.
Miami, Fl, USA. October 24th, 2019.

Allocations: Some results and some open problems.
Probability Workshops, Department of Statistics, Oxford University.
Oxford, England. June 13, 2016.

On the explanatory power of Principal Components.
XIII Latin American Congress of Probability and Statistics (CLAPEM).
Cartagena, Colombia. September 25, 2014.

Principal Components Analysis and Bump Hunting using PRIM.
Biostatistics Seminar, Biostatistics Division, University of Miami.
Miami, Fl, USA. September 14, 2013.

Optimization of PRIM under normality.
Sco 2013. Politecnico di Milano.
Milan, Italy. September 10, 2013.

Optimization of PRIM under normality.
Joint Statistical Meetings.
Montreal, Canada. August 5, 2013.

Allocations: What they are and some open problems.
Graduate Seminar, Department of Mathematics, University of Miami.
Miami, Fl, USA. March 30, 2012.

Grandes desvíos en el matrimonio estable de Poisson y Lebesgue con apetitos aleatorios.
Statistics Seminar, Statistics Department, Universidad del Valle.
Cali, Colombia. May 10, 2011.

Large deviations for the stable marriage of Poisson and Lebesgue with random appetites.
Stochastic Processes Seminar, Mathematics Department, Universidad de los Andes.
Bogotá, Colombia. September 22, 2010.

Tail bounds for the stable marriage of Poisson and Lebesgue with random appetites.
Seminar of theory and methods, Statistics Department, Universidad Nacional de Colombia.
Bogotá, Colombia. September 6, 2010.

Some properties of allocations with random appetites (Poster).
13th Brazilian Probability School.
Maresias, SP, Brazil. August 2–8, 2009.

Percolación para asignaciones estables con apetitos aleatorios.
Stochastic Processes Workshop, Mathematics Department, Universidad de los Andes.
Bogotá, Colombia. April 9, 2008.

Percolación para el matrimonio estable de Poisson y Lebesgue con apetitos aleatorios.
Seminar of theory and methods, Statistics Department, Universidad Nacional de Colombia.
Bogotá, Colombia. March 30, 2008.

Hipótesis lineales sobre medias para experimentos de franjas en parcelas divididas.
IX Latin American Congress of Probability and Statistics (CLAPEM).
Punta del Este, Uruguay. March 22–26, 2004.

Publications

[1] Daniel Andrés. Díaz-Pachón, Ola Hössjer, and Robert J. Marks II. Is cosmological tuning fine or coarse? *Under review*, 2021.

[2] Tianhao Liu, Daniel Andrés Díaz-Pachón, J. Sunil Rao, and Jean-Eudes Dazard. Mode hunting using pettiest component analysis. *Under review*, 2021.

[3] Daniel Andrés Díaz-Pachón and J. Sunil Rao. A simple correction for COVID-19 sampling bias. *Journal of Theoretical Biology*, 512:110556, 2021.

[4] Daniel Andrés Díaz-Pachón and Robert J. Marks II. Active Information Requirements for Fixation on the Wright-Fisher Model of Population Genetics. *BIO-Complexity*, 2020(4):1–6, 2020.

[5] Daniel Andrés Díaz-Pachón and Robert J. Marks II. Generalized active information: Extensions to unbounded domains. *BIO-Complexity*, 2020(3):1–6, 2020.

[6] Daniel Andrés Díaz-Pachón, Juan P. Sáenz, and J. Sunil Rao. Hypothesis testing with active information. *Stat. & Probab. Letters*, 161:108742, 2020.

[7] Daniel Andrés Díaz-Pachón, Juan P. Sáenz, J. Sunil Rao, and Jean-Eudes Dazard. Mode hunting through active information. *Applied Stochastic Models in Business and Industry*, 35(2):376–393, 2019.

[8] Daniel Andrés Díaz-Pachón, Jean-Eudes Dazard, and J. Sunil Rao. Unsupervised Bump Hunting Using Principal Components. In S. Ejaz Ahmed, editor, *Big and Complex Data Analysis: Methodologies and Applications*, pages 325–345. Springer International Publishing, 2017.

[9] Daniel Andrés Díaz-Pachón, Francisco J. P. Zimmermann, and Luis Alberto López-Pérez. F tests for the strip-split plot design. *Biometric Brazilian Journal*, 34(2):279–303, 2016.

[10] Daniel Andrés Díaz-Pachón, J. Sunil Rao, and Jean-Eudes Dazard. Optimization of Patient Rule Induction Method PRIM under normality. In *Complex Data Modeling and Computationally Intensive Statistical Methods for Estimation and Prediction (S.Co.). Milan, Italy.* S.Co. Proceedings., Politecnico di Milano, Aula Rogers, Milan, Italy, 2013.

[11] Daniel Andrés Díaz-Pachón. Percolation for the stable marriage of Poisson and Lebesgue with random appetites. *Stochastics*, 85(2):252–261, 2013.

[12] Daniel Andrés Díaz-Pachón. A note on large deviations for the stable marriage of Poisson and Lebesgue with random appetites. *Journal of Theoretical Probability*, 25(1):77–91, 2012.

References

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Robert J. Marks II
Distinguished Professor,
Electrical & Computer Engineering, Baylor University.
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