

## EDUCATION

**Vienna University of Technology**, Vienna, Austria

Ph.D., Mathematics, June 2017

- Dissertation: “Tensor valuations on lattice polytopes”
- Advisor: Monika Ludwig

**Polytechnic Institute of New York University**, New York, New York

Ph.D. Candidate, Mathematics, August 2012 - May 2013

**San Diego State University**, San Diego, California

M.A., Mathematics, August 2012

- Thesis: “Steps towards classification of semigraphoids”
- Advisor: Michael O’Sullivan

**Arizona State University**, Tempe, Arizona

B.A., Mathematics, December 2005

## PUBLICATIONS

*Ehrhart tensor polynomials*, with Sören Berg and Katharina Jochemko. *Linear Algebra and its Applications* **539** (2018), 72-93.

*Tensor valuations on lattice polytopes*, with Monika Ludwig. *Advances in Mathematics* **319** (2017), 76-110.

## ACADEMIC EXPERIENCE

**Brooklyn College**, New York, New York

*Adjunct Assistant Professor* Fall 2018

- **Elementary Mathematics from an Advanced Standpoint**

Replacement instructor for one class of 33 students

*Responsibilities:* Leading lectures and group discussions; writing exams and lectures; grading

**Vienna University of Technology**, Vienna, Austria

*Research Assistant* September 2013 - July 2017

- **Discrete Mathematics**, Winters 2014, 2015

Teaching assistant for one session of ~20 students each term

*Responsibilities:* Leading recitation discussions; grading student presentations of solutions

**New York University**, New York, New York

*Adjunct Instructor* Summer 2013

- **Precalculus**, Pre-Freshman Summer Opportunity Program

Primary instructor for two ~18 student classes

*Responsibilities:* Leading lectures and group discussions; writing syllabi, homework, exams, and lectures; grading

**Polytechnic Institute of New York University**, New York, New York

*Adjunct Instructor* September 2012 - August 2013

- **Precalculus**, Spring 2013

Primary instructor for one six-hour class of 25 students

*Responsibilities:* Leading lectures and group discussions; writing lectures, collaboratively writing exams and grading

- **Resource Center**, Fall 2012, Winter Mini Session 2013

**San Diego State University**, San Diego, California

*Instructor* August 2009 - May 2011

- **Precalculus**, Spring 2010, Fall 2010, Spring 2011

Primary instructor for two ~45 student classes each term

*Responsibilities:* Leading lectures and group discussions; writing syllabi, homework, exams, and lectures; grading

- **Calculus III**, Fall 2009

Teaching assistant for 6 recitations with 210 students

*Responsibilities:* Leading recitation lectures and discussions; grading

ACADEMIC  
PRESENTATIONS

Joint Mathematics Meeting, AMS Special Session on Geometric and Topological Combinatorics  
(Invited Talk), *Ehrhart tensor polynomials*, Baltimore, Maryland, January 2019

Colloquium, San Diego State University  
(Invited Talk), *An extension of Pick's Theorem and Ehrhart theory*, San Diego, California, November 2018

Colloquium, NYU Tandon School of Engineering  
(Invited Talk), *Tensor valuations and Ehrhart tensor polynomials*, New York, New York, July 2017

INdAM: Analytic Aspects of Convexity  
(Invited Talk), *Valuations on lattice polytopes*, Rome, Italy, October 2016

Seminar der Arbeitsgruppen Diskrete Mathematik, Geometry & Discrete Geometry, TU Berlin  
(Invited Talk), *Tensor valuations on lattice polytopes*, Berlin, Germany, July 2016

Discrete Geometry Days in Budapest  
(Invited Talk), *Tensor valuations on lattice polytopes*, Budapest, Hungary, June 2016

Algebraic Statistics in the Alleghenies at Penn State  
(Poster Presentation), *Maximal semigraphoids*, University Park, Pennsylvania, June 2012

SIAM Conference on Applied Algebraic Geometry  
(Poster Presentation), *Maximal semigraphoids*, Raleigh, North Carolina, October 2011

SDSU Research Symposium  
(Poster Presentation), *Semigraphoids and their varieties*, San Diego, California, February 2011

RESEARCH VISITS TU Berlin, Host: Martin Henk, April-June 2015, July 2016

WORKSHOPS BMS Summer School, Convex Geometry - Discrete and Computational, Berlin, Germany, July 2015

IHP Winter School, Combinatorial and Algorithmic Aspects of Convexity, Paris, France, January 2015

IMA Summer Graduate Program, Algebraic Geometry for Applications, Atlanta, Georgia, June - July 2012

MSRI Summer Graduate Workshop, Commutative Algebra, Berkeley, California, June 2011

MSRI Summer Graduate Workshop, Algebraic, Geometric, and Combinatorial Methods for Optimization, Berkeley, California, August 2010

PROFESSIONAL  
EXPERIENCE

**Analyst, Strategic Operations, Encore Capital Group** April 2007 - December 2008  
San Diego, California

**Junior Consultant, Business Valuations, Chiltern plc** July 2006 - December 2006  
London, United Kingdom (6-month work visa)

**Actuarial Analyst, Oxford Life Insurance Company** August 2005 - June 2006  
Phoenix, Arizona