

# Curriculum Vitae

## ANDREAS H. HAMEL

### CURRENT POSITION

Professor for Mathematics  
Free University of Bozen-Bolzano  
Faculty of Economics and Management  
Universitätsplatz 1 – Piazzetta dell' Università 1  
I-39031 Bruneck-Brunico

### ACADEMIC QUALIFICATIONS/DEGREES

Abilitazione (Italian) 2017 Abilitazione per la prima fascia: Settore Concorsuale 13/D4 – Metodi Matematici Dell'Economia e Delle Scienze Attuariale e Finanziare  
Habilitation (German) 2005, Martin Luther University Halle-Wittenberg, Germany, see <http://sundoc.bibliothek.uni-halle.de/habil-online/05/05H167/index.htm>  
Ph.D. 1996, Martin Luther University Halle-Wittenberg, grade "summa cum laude"  
Diploma (M.Sc.) 1991, in Mathematics with best grade at College of Technology "Carl Schorlemmer" Merseburg, Germany

### PREVIOUS ACADEMIC POSITIONS

2013–18 Associate Professor for Mathematics, Free University of Bozen-Bolzano  
2010–13 Associate Professor for Mathematics, Yeshiva University New York; 2014: offer for tenured full professor position at YU (declined)  
2007–10 Associate Researcher/Lecturer at Department of Operations Research and Financial Engineering (ORFE), Princeton University, NJ, USA  
2006 Substitute Professor for Stochastics at Martin-Luther-University Halle-Wittenberg, Germany  
2005–06 Visiting Researcher at Instituto Nacional de Matemática Pura e Aplicada (IMPA), Rio de Janeiro, Brazil, with a grant of CNPq, advisor: Prof. Dr. A. Iusem  
1998–05 Assistant Professor (C1) at Martin-Luther-University Halle-Wittenberg  
Within this period: 4-9/1999 research stay at Imperial College, London, Department of Electrical Engineering with a grant of DAAD, advisor: Prof. R. B. Vinter  
1996–98 Postdoctoral position at Martin-Luther-University Halle-Wittenberg  
1991–95 PhD position (with teaching) at Technische Hochschule (College of Technology) Merseburg, since March 1993 at Martin-Luther-University Halle-Wittenberg

## RESEARCH INTERESTS

Convex and variational analysis; optimization theory, in particular problems with a set-valued objective; mathematical finance, in particular market models with transaction costs; mathematical economics, in particular incomplete preferences and game theory; multivariate statistics, in particular quantiles.

## SPECIAL RESEARCH ACTIVITIES/ACHIEVEMENTS

Co-developed the new area “Set Optimization” since approx. 2000 which has surprising applications in mathematical finance, economics, statistics, game theory and multi-criteria decision making; invented set optimization approach to risk measures for multi-variate positions in markets with frictions; initiated conference series “Set Optimization for Applications” (formerly “Set Optimization Meets Finance;” 1st edition 2012 in Wittenberg, Germany; 2nd edition 2014 Bruneck-Brunico, Italy; 3rd edition 2016 Vienna, Austria; 4th edition 2019 Jena, Germany).

## TEACHING INTERESTS/ACHIEVEMENTS

Taught courses about a variety of mathematical subjects (Linear Algebra, Probability, Differential Equations, Tensor Calculus, Numerical Analysis, Convex and Variational Analysis) as well as courses on Risk Management, Financial Mathematics and Mathematics for Economics at University Halle-Wittenberg, IMPA Rio de Janeiro, Princeton University, Yeshiva University New York and Free University of Bozen-Bolzano.

Designed the course “Convex Analysis for Finance and Economics,” the first version of which was run at Martin Luther University Halle-Wittenberg in 2003, and an extended course became part of the Ph.D. program at the Department of Operations Research and Financial Engineering at Princeton University (versions of it were taught by B. Rudloff and P. Cheridito at Princeton University, M. Kupper at Humboldt University Berlin and B. Rudloff at WU Vienna).

Organized summer schools on Variational Analysis for Finance and Economics, Yeshiva University, New York, August 2012, and “Set Optimization for Applications”, Free University of Bozen-Bolzano in Bruneck-Brunico, June 2017.

At Free University of Bozen-Bolzano, responsible for the one-year-course “Mathematics for Economists” within the Bachelor program “Tourism-, Sports- and Eventmanagement.”

Currently supervising two PostDocs at UniBZ. Supervised three Ph.D. students and many diploma/senior/honor’s theses as well as bachelor theses at four universities.

Worked continuously with high school students and offered corresponding math courses and projects, in particular on Mathematics of Juggling.

## AWARDS & GRANTS

- 2015 Best Teacher Award within the Bachelor program “Tourism-, Sports- and Eventmanagement” at Free University of Bozen-Bolzano
- 2014 Grant for research project “An abstract convexity approach to scalarization in set/vector optimization and to multi-utility representation”
- 2014 Best Teacher Award for the academic year 2013/14 of Faculty of Economics and Management at Free University of Bozen-Bolzano
- 2012 Advisor for Kressel scholar Uri Carl, Yeshiva College
- 2010/11 Principal bachelor thesis advisor for Sophie Qingzhen Wang, won Peter A. Greenberg '77 Prize, Princeton University
- 2010/11 Principal bachelor thesis advisor for Mihaela Yankova, won Ahmet S. Cakmat Prize, Princeton University
- 2008 & 2009 Selected for ”Princeton Engineering Commendation List for Outstanding Teaching”
- 2005/06 Research Grant of Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Brazil
- 2002–2004 Teaching Grant of Federal State Sachsen-Anhalt, Germany, and EU Commission
- 1999 Research Grant of German Academic Exchange Service (DAAD)
- 1997 Martin-Luther-Medal of Martin-Luther-University Halle-Wittenberg
- 1997 Dorothea-Erxleben-Award of Martin-Luther-University Halle-Wittenberg