# **Benny Moldovanu**

#### **Academic career**

1989	M.Sc. in Mathematics, Hebrew University Jerusalem, Israel
1991	PhD in Economics, University of Bonn
1991 - 1995	Assistant Professor, University of Bonn
1992 - 1993	Visiting Assistant Professor, University of Michi-
	gan, Ann Arbor, MI, USA
1995	Habilitation, University of Bonn
1995 - 2002	Professor (C4), University of Mannheim
1998	Visiting Research Professor, Northwestern Uni-
	versity, Evanston, IL, USA
Since 2002	Professor (C4/W3) of Economics, University of
	Bonn
2004	Visiting Professor, Yale University, New Haven,
	CT, USA
2005	Visiting Professor, University College London,
	England, UK
2009	Visiting Professor, Northwestern University,
	Evanston, IL, USA



#### Honours

2001	Max Planck Research Award
2004	Member of the North Rhine-Westphalian Academy of Sciences, Humanities and the Arts
2004	Gossen Prize of the German Economic Association
2004	Fellow of the Econometric Society
2010	ERC Advanced Investigator Grant

### **Invited Lectures**

2002	Econometric Society European Meeting, Venice, Italy
2003	Econometric Society US Meeting, Evanston, IL, USA
2004	World Congress, Game Theory Society, Marseille, France
2005	World Congress, Econometric Society, London, England, UK
2008	European Congress, Econometric Society, Milan, Italy
2011	Keynote Lecture, EARIE Annual Conference, Stockholm, Sweden

## **Research Projects and Activities**

DFG Collaborative Research Center SFB/TR 15 "Governance and the Efficiency of Economic Systems"

Principal Investigator, "Auction and Mechanism Design in Complex Environments"

ERC Advanced Grant "Dynamic Mechanism Design"

Principal Investigator

Bonn Graduate School of Economics

Speaker

DFG Cluster of Excellence "Hausdorff Center for Mathematics"

Principal Investigator

DFG Collaborative Research Center SFB/TR 224 "Economic Perspectives on Societal Challenges: Equality of Opportunity, Market Regulation, and Financial Stability",

Principal Investigator, project "Information aggregation and the role of transfers in mechanism design"

## Research profile

My main research has applied game theory and information economics to auctions [4, 10], mechanism design [3, 7, 8], contests and matching [5, 6, 9] and voting [1, 2]. These applications require an array of mathematical concepts, methods, and results from several fields such as variational and convex analysis, probability and mathematical statistics, differential geometry and combinatorial optimization. A common conceptual thread is the quest for mechanisms (i.e., "rules of the game") that lead to desirable outcomes even if the agents (who are endowed with their own goals, resources and information) behave strategically. A major recent advance was establishing the equivalence between dominant strategy and Bayesian implementation in private values frameworks with one dimensional types [3]. The applied methods were borrowed from the mathematics of computed tomography.

## **Editorships**

- Journal of Economic Theory (Associate Editor, 2001 2009)
- Games and Economic Behavior (Associate Editor, 2002 2007)
- Econometrica (Associate Editor, 2002 2008)

Research Area I In the last 5 years I have mostly focused on mechanism design with monetary

transfers in dynamic frameworks where demand is modeled as a (possibly unknown) stochastic process. In the future I shall focus on mechanism design problems under various frictions such as the absence of money, the absence of commitment or costly verification. A particular emphasis is on welfare properties of voting and the application to these questions of novel methods from Fourier analysis.

## **Supervised theses**

Diplom theses: 30, currently 1 PhD theses: 15, currently 4

#### **Selected PhD students**

Thomas Kittsteiner (2002): "Applications of Mechanism and Auction Design to Partnership Dissolution and Sequential Sale", now Professor, RWTH Aachen

Moritz Meyer-ter-Vehn (2003): "Ex-post implementation: Impossibility, Characterizations and Mixed Bundling Auctions",

now Associate Professor, University of California, Los Angeles, CA, USA

Xianwen Shi (2007): "Contests and auctions",

now Associate Professor, University of Toronto, ON, Canada

Alexander Westkamp (2009): "Matching Markets Essays on Matching Markets",

now Associate Professor, University of Cologne

Konrad Mierendorff (2010): "Dynamic Mechanism Design",

now Lecturer, University College London, England, UK

Nora Szech (2010): "Five Essays in Economic Theory",

now Professor, Karlsruhe Institute of Technology

Deniz Dizdar (2013): "Four Essays in Economic Theory",

now Assistant Professor, University of Montreal, QC, Canada

Ann Kathrin Rosler (2014): "Matching and Information Acquisition",

now Assistant Professor, University of Michigan, Ann Arbor, USA

Andreas Kleiner (2015): "Mechanism Design without Money",

now Assistant Professor, Arizona State University, Phoenix, USA

### **Habilitations**

Christian Ewerhart (1999), now Professor, University of Zürich, Switzerland Oliver Kirchkamp (2001), now Professor, Friedrich Schiller University, Jena Roman Inderst (2002), now Professor, Goethe University, Frankfurt Aner Sela (2002), now Professor, Ben Gurion University Beer Sheeva, Israel Heidrun Hoppe (2004), now Professor, University of Hannover

Alex Gershkov (2007), now Professor, Hebrew University Jerusalem, Israel Paul Schweinzer (2008), now Professor, Klagenfurt University, Austria

## **Selected publications**

- [1] Andreas Kleiner and Benny Moldovanu. Content-based agendas and qualified majorities in sequential voting. *Am. Econ. Rev.*, 2017.
- [2] Alex Gershkov, Benny Moldovanu, and Xianwen Shi. Optimal voting rules. Rev. Econ. Stud., 2016.
- [3] Alex Gershkov, Jacob K. Goeree, Alexey Kushnir, Benny Moldovanu, and Xianwen Shi. On the equivalence of bayesian and dominant strategy implementation. *Econometrica*, 81(1):197–220, 2013.
- [4] Alex Gershkov and Benny Moldovanu. Learning about the future and dynamic efficiency. *Am. Econ. Rev.*, 99(4):1576–1588, 2009.
- [5] Heidrun C. Hoppe, Benny Moldovanu, and Aner Sela. The theory of assortative matching based on costly signals. *Rev. Econom. Stud.*, 76(1):253–281, 2009.
- [6] Benny Moldovanu, Aner Sela, and Xianwen Shi. Contests for status. J. Pol. Econ., 115(2):338-363, 2007.
- [7] Philippe Jehiel, Moritz Meyer-ter Vehn, Benny Moldovanu, and William R. Zame. The limits of ex post implementation. *Econometrica*, 74(3):585–610, 2006.
- [8] Philippe Jehiel and Benny Moldovanu. Efficient design with interdependent valuations. *Econometrica*, 69(5):1237–1259, 2001.
- [9] Benny Moldovanu and Aner Sela. The optimal allocation of prizes in contests. *Am. Econ. Rev.*, 91(3):542–558, 2001
- [10] Philippe Jehiel, Benny Moldovanu, and Ennio Stacchetti. How (not) to sell nuclear weapons. *Am. Econ. Rev.*, 86(4):814–829, 1996.