

## LEONIE BAUMANN

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### CURRENT POSITION

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Postdoctoral Research Associate, Cambridge-INET Institute, Faculty of Economics,  
University of Cambridge, since 2016

### GRADUATE STUDIES

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Ph.D. in Economics (summa cum laude), University of Hamburg, Germany, 2012-17

Thesis title: Essays on Social Interactions in Microeconomic Theory

Committee: Anke Gerber (primary advisor), Andreas Lange (secondary advisor),  
Gerd Mühlheusser, Lydia Mechtenberg

Summer School of the Econometric Society: Frontiers in Microeconomic Theory, 08/2014

M.Sc. in Economics, University of Hamburg, 2009-12

### UNDERGRADUATE STUDIES

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B.A. in Economics (with distinction), University of Siegen, Germany, 2005-09

B.A. in Literary, Cultural and Media Studies, University of Siegen, 2004-09

ERASMUS Exchange, Department of Economics, University of Orléans, France, 01-06/2008

### RESEARCH AND TEACHING INTERESTS

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Economic Theory, Networks, Mechanism Design, Game Theory

Additional teaching interests:

Economics of Information, Environmental Economics, Industrial Organization

## RESEARCH AND WORK EXPERIENCE

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Postdoctoral Associate, Christ's College, Cambridge, 2017-18

Bye-Fellow, Christ's College, Cambridge, 2016-17

Research and Teaching Assistant for Anke Gerber (Microeconomic Theory and Experiments), University of Hamburg, 2012-16

Visiting Student Researcher with Matthew Jackson, Stanford University, 02-04/2014

Research Assistant for Jann Lay (Project "Large Scale Land Acquisitions and Sustainable Development"), German Institute of Global and Area Studies, Hamburg, Germany, 2010-11

Student Assistant for Rüdiger Pethig (Environmental Economics), University of Siegen, 01-09/2009

## WORKING PAPERS

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Self-Ratings and Peer Review (November 2018), *job market paper*

A previous version of the paper is *Identifying the Best Agent in a Network* (2017) (first version: 2016).

A Model of Weighted Network Formation (August 2017)

2<sup>nd</sup> round R&R at *Theoretical Economics*.

Previous versions of this paper were titled *Time Allocation in Friendship Networks* (first version: 2014).

Demand Cycles and Heterogeneous Conformity Preferences (September 2017)

## PRESENTATIONS

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| 2018 | Paris School of Economics; Northwestern (Kellogg Strategy); HU Berlin; BiNoMa Workshop; Barcelona GSE Summer Forum: Networks Workshop; Oxford (scheduled)   |
| 2017 | Third Annual Conference on Network Science and Economics; Coalition Theory Network Annual Workshop; BiNoMa Workshop; University of Kent; Econometric Society European Meeting; VfS Annual Conference; Warsaw University; Networks Reading Group Cambridge |
| 2016 | Max Planck Institute for Research on Collective Goods, Bonn; University of Essex; Cambridge-INET Institute (2); University of Bonn; Second Annual Conference on Network Science and Economics; Málaga University; III MOMA Meeting                        |

- 2015 Annual Congress of the European Economic Association; World Congress of the Econometric Society; Annual Conference of the Society for the Advancement of Economic Theory; Coalition Theory Network Annual Workshop; Workshop on Networks, Queen Mary University
- 2014 PhD Seminar, University of Hamburg; Networks Discussion Group, Stanford University

## **SHORT VISITS**

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- 2018 Paris School of Economics (1 week); Northwestern; Stanford (each 2 weeks)
- 2017 University of Bonn; Warsaw University (each 1 week)

## **TEACHING EXPERIENCE**

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Game Theory, Welfare, and Applications & Economics of Uncertainty and Information  
Supervisions for 2nd year undergraduates in Economics, Christ's College, Cambridge, 2016-18

Microeconomics

Tutorial for 1st year undergraduates in Economics (in German), University of Hamburg, summer 2012, 2015

Microeconomics II

Tutorial for 2nd year undergraduates in Economics (in German), University of Hamburg, winter 2013-14

Economics of Information

Tutorial for 3rd year undergraduates in Economics (in German and English), University of Hamburg, winter 2012-14

Microeconomics for Business Administration students

Tutorial for 1st year undergraduates (in German), University of Hamburg, summer 2013

## **SCHOLARSHIPS AND AWARDS**

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Econometric Society World Congress Travel Grant, 2015

Hamburglobal, 2014

Travel subsidy out of the corporate capital of the University of Hamburg, 2014, 2015

ERASMUS foreign exchange scholarship, 2008

## **REFeree SERVICE**

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Czech Economic Review, Economics Letters, Journal of Economic Behavior and Organization, Journal of Economic Theory, Journal of Mathematical Economics, Theoretical Economics

## **ACADEMIC AND ADMINISTRATIVE SERVICE**

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Organization of Networks Reading Group at Cambridge-INET, since 2016

Organization of Workshop on Networks at Cambridge-INET, 04/2017

Member of the Faculty Council of the Faculty of Business, Economics and Social Sciences, University of Hamburg, 2013-15

Member of the hiring committee for two Assistant Professors in Economics at the Department of Economics, University of Hamburg, 04-06/2011

## **LANGUAGES**

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German (native), English (fluent), French (good), Spanish (good)

## **CITIZENSHIP**

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German

## **REFERENCES**

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Sanjeev Goyal (current advisor)  
University of Cambridge  
sg472@cam.ac.uk

Anke Gerber (PhD advisor)  
University of Hamburg  
anke.gerber@uni-hamburg.de

Matthew Elliott  
University of Cambridge  
mle30@cam.ac.uk

Matthew Jackson  
Stanford University  
jacksonm@stanford.edu

Francis Bloch  
Paris School of Economics  
francis.bloch@univ-paris1.fr

### Self-Ratings and Peer Review

#### Job Market Paper

A previous version of the paper is *Identifying the Best Agent in a Network* (2017) (first version: 2016).

A principal has to allocate a prize without monetary transfers. She wants to give it to the most valuable agent, but does not know any agent's value. Agents' information is described by a network: Each agent knows her own value and the values of her neighbors. Given a principal's prize allocation rule, agents compete for the prize and send messages about themselves (*application*) and about their neighbors (*references*) to the principal. They can lie, but only to a certain extent. Can full implementation be obtained? This means, does there exist a prize allocation rule such that the best agent gets the prize in every equilibrium? Bayesian-monotonicity and the revelation principle fail in this setup. I propose a mechanism which allocates the prize as a function of "best" applications and "worst" references. This mechanism fully implements the principal's objective if the network is complete. In environments where agents only lie if it increases their chances of winning, an extended version of the mechanism fully implements the principal's objective for a larger class of networks.

### A Model of Weighted Network Formation

2<sup>nd</sup> round R&R at *Theoretical Economics*. Previous versions of this paper were titled *Time Allocation in Friendship Networks* (first version: 2014).

Many networks are not only characterised by who is linked to whom but also by the intensity of links. Networks in which links can have different intensities are *weighted networks*. We propose a model of weighted network formation in which homogeneous agents have a limited resource to form links of possibly different intensity with other agents and for private purposes. Both symmetric and asymmetric equilibrium networks are analysed. Each component of an equilibrium network is either "reciprocal" or "non-reciprocal". In reciprocal components, any two agents invest equally into their link. In non-reciprocal components, there exist "diversified" and "concentrated" agents and every diversified agent is only linked to concentrated agents and vice versa. For each link, the concentrated agent invests more into the link than the diversified agent. The different architectures of reciprocal and non-reciprocal equilibrium components are described and comparative statics for equilibrium networks are provided. We show that no equilibrium network is stable against pairwise deviations if agents are not loyal; with loyalty, fully reciprocal equilibrium networks are pairwise stable. Equilibrium networks are never efficient due to positive externalities from network investments.

### Demand Cycles and Heterogeneous Conformity Preferences

We analyze the dynamics of the distribution of demand across the population when agents have heterogeneous preferences for conformity and individuality, and can choose from a set of three different consumption options. Agents are continuously distributed on the unit interval and the

position of an agent measures her degree of conformity with agent 0 being the most individualistic and agent 1 the most conformist. An agent seeks to imitate others who are more individualistic than she is and seeks to distinguish herself from others who are more conformist than she is. In each time period, every agent chooses her utility-maximizing consumption option based on the distribution of demand in the previous time period. We show that a large class of initial distributions converges to the same cycle of distributions. Within this cycle, the demand over time for each option resembles a fashion cycle: An option is taken up by a segment of the most individualistic agents first. Then, demand for this option grows and moves through the entire population from individualistic to more conformist agents. At the end of the fashion cycle, only a segment of the most conformist agents still consumes the option because the more individualistic agents have turned to a different one instead. Finally, also conformist agents abandon it. However, after one time period has passed, the fashion cycle for this option starts over again.