

CONTACT INFORMATION
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PERSONAL INFORMATION
BORN January 16, 1976 in Bremen, Germany
CITIZENSHIP German
FAMILY STATUS not married, 1 daughter (born Oct 9, 2006)

ACADEMIC CAREER
Carl von Ossietzky University of Oldenburg
Center for Social Science Methodolgy, Germany **Jan 2010 – present**

Researcher and Manager of experimental lab (part time)

ETH Zurich, Chair of Systems Design, Switzerland **Apr 2007 – present**

Contract work

Nov 2009 – present

Postdoctoral researcher

Apr 2007 – Oct 2009

Project [CyberEmotions](#)

Feb 2009 – present

Europeans Commissions 7th Framework Programme, Large scale integrating project (9 partners),
Workpackage: Sociophysics and agent-based models of emotion dynamics in cyberspace

Proposal writing [CyberEmotions](#)

Dec 2008 – Jan 2009

Project [COST P10 Physics of Risk](#)

Apr 2007 – Nov 2008

Workpackage [Failure risk propagation in economic and supply networks](#)

Universität Bremen, Germany **Apr 1998 – Mar 2007**

Doctoral Student with independent stipend

Jan 2004 – Mar 2007

Tutor, Mathematics for Economists

Apr 2000 – Mar 2001

Undergraduate, Mathematics, Philosophy, 8 terms

Apr 1998 – Mar 2003

Carl von Ossietzky Universität Oldenburg, Germany **Oct 1996 – Apr 1997**

Undergraduate, Mathematics, Computer Science, 1 term

EDUCATION **Universität Bremen, Germany**

Doktor rer. nat., Mathematics, March 2007, advised by [Ulrich Krause](#) (Mathematics) and [Rainer Hegselmann](#) (Philosophy, Simulation), Grade: *summa cum laude*

Diploma, Mathematics, Feb 2003, Grade: *very good* (1.2)

Schulzentrum an der Walliser Straße, Bremen, Germany

Abitur (university-entrance diploma), June 1995, Major courses: math, history

Grade: *very good* (1.3), best of the year

AWARDS *Scholarship for Doctoral Studies*, Friedrich-Ebert-Stiftung, Germany **Jan 2004 – Dec 2006**

Prize for Applied Research in Complexity Science (3000 EUR), Best Poster, Workshop [“Potentials of Complexity Science for Business, Governments, and the Media 2006”](#), Aug 3–5, 2006, Budapest, Hungary

Best student paper (700 EUR) [“2nd International Meeting: Connectionist Approaches in Economics and Management - ASCEG 2005”](#), 17–18 Nov, 2005, Aix-en-Provence, France, 2nd prize

TEACHING

Carl von Ossietzky Universität Oldenburg, Germany

Lecturer Kollektivität und soziale Emergenz, Agent-basierte Simulation (Master) WiSe 2011/2012, No. 1.07.271
Tutor Exercise Course: Einführung in die Politikwissenschaft (Bachelor) WiSe 2011/2012, No. 1.07.023
Lecturer Experimentelle Sozialforschung (Master) WiSe 2010/2011, No. 1.07.231
Tutor Exercise Course: Datenanalyse empirischer Sozialforschung (Bachelor) SoSe 2010, No. 1.07.076
Tutor Exercise Course: Datenanalyse empirischer Sozialforschung (Bachelor) SoSe 2010, No. 1.07.077
Tutor Exercise Course: Datenanalyse empirischer Sozialforschung (Bachelor) SoSe 2010, No. 1.07.078

Universität Bremen, Germany

Co-Organiser Seminar Positive Dynamische Systeme (Mathematik) WiSe 2006/2007, VAK 03-418
Co-Organiser Seminar Positive Dynamische Systeme (Mathematik) SoSe 2006, VAK 03-340
Co-Organiser Seminar Positive Dynamische Systeme (Mathematik) WiSe 2005/2006, VAK 03-342
Co-Organiser Seminar Positive Dynamische Systeme (Mathematik) SoSe 2005, VAK 03-330
Tutor Mathematik (Wirtschaftswissenschaften) WiSe 2000/2001, VAK 07-107
Tutor Mathematik II (Wirtschaftswissenschaften) SoSe 2000, VAK 07-108

SHORT TERM
ACADEMIC
ACTIVITIES

Participant Brazil Project of the Friedrich Ebert Foundation, Young Policy Dialog during 2005
 Frankfurt, Berlin, São Paulo, Brasilia, Rio de Janeiro
Researcher Max-Planck Institut Physik komplexer Systems, Dresden, Germany Aug – Sep 2004
 EXYSTENCE Thematic Institute “From Many-Particle Physics to Multi-Agent Systems”
Participant 1st Winterschool for the Physics of Socio-Economic Systems Feb 2004
 Universität Konstanz, Germany

SCIENTIFIC
COMMUNITY
SERVICE

Conference Programme Committee Member [European Conference on Complex Systems 2011](#), Vienna, Satellite Workshop [Cultural and opinion dynamics: Modeling, Experiments and Challenges for the future](#)
Journal Referee SIAM Journal on Control and Optimization (1), Current Biology (1 pre-submission inquiry), European Union Politics (1), IEEE Transactions on Automatic Control (2), Annals of Applied Probability (1), Journal of Artificial Societies and Social Simulation (2), European Journal of Economic and Social Systems (3), Physica A (2), European Physical Journal B (2), Advances in Complex Systems (3), Journal of Economic Interaction and Coordination (1)
Delegate Management Meeting “CyberEmotions”, Bremen , July 2009, for ETH Zürich
Assistant Administration grant 231323 “CyberEmotions” of FP7 Commission of the EU, for ETH Zürich
Delegate Negotiation Meeting “CyberEmotions” in pre-submission phase, Brussels, Nov 2008, for ETH Zürich
Assistant Administration grant C05.0148 “Physics of Risk” of Swiss Secretariat for Education and Research (5 Swiss partners), for ETH Zürich
Assistant Local organization of International Workshop “The Physics Approach to Risk:: Agent-based Models and Networks”, Oct 27–29, 2008, Zürich
Delegate COST P10 “Physics of Risk” Management Committee Meeting at 4th Annual Meeting, Sep 21–23, 2007, Palermo, Italy
Organisation Workshop [Political Participation in Brazil and Germany](#), Centre Marc Bloch, Berlin, Germany, Dec 2, 2005

MEMBERSHIP

Deutsche Mathematiker-Vereinigung (DMV), Wikimedia Deutschland e.V., Mehr Demokratie e.V.

LANGUAGES

German (native), English (very good written and spoken), Matlab (expert), R (advanced), L^AT_EX including beamer,tikz (very good), MySQL (good), HTML (good)

COMPUTER
SKILLS

setup of computer simulations (matlab, R), program experiments (z-Tree), data analysis (matlab, R, MySQL), webdesign, all office software, imaging software on pixel and vector basis (e.g. PhotoShop, Illustrator), desktop publishing software (e.g. InDesign), operating systems: Linux, Windows, Mac

PAPERS

Preprints

1. Jan Lorenz. [Zur Methode der agenten-basierten Simulation in der Politikwissenschaft am Beispiel von Meinungsdynamik und Parteienwettbewerb](#). *unpublished draft*, 2012
2. Michael D. König, Jan Lorenz, and Fabrizio Zilibotti. Innovation vs. imitation and the evolution of productivity distributions. *Working Paper presented at “Public Economic Theory Conference” June 1–4 Indiana University*, 2011
3. Jan Lorenz and Frank Schweitzer. [When it pays off to pay tax: Growth induced by redistribution](#). *submitted to PLoS ONE*, 2011
4. Patrick Groeber, Jan Lorenz, and Frank Schweitzer. [A microfoundation of social influence in models of opinion formation](#). *preprint submitted to Journal of Mathematical Sociology*, 2011

Journal Publications

5. Jan Lorenz, Heiko Rauhut, Frank Schweitzer, and Dirk Helbing. [How social influence can undermine the wisdom of crowd effect](#). *Proceedings of the National Academy of Sciences (PNAS)*, 108(22):9020–9025, 2011
Letter: Heiko Rauhut, Jan Lorenz, Frank Schweitzer, and Dirk Helbing. [Reply to Farrell: Improved individual estimation success can imply collective tunnel vision](#). *Proceedings of the National Academy of Sciences*, 108(36):E626, 2011
6. Heiko Rauhut and Jan Lorenz. [The wisdom of crowds in one mind: How individuals can simulate the knowledge of diverse societies to reach better decisions](#). *Journal of Mathematical Psychology*, 55:191–197, 2010
7. Jan Lorenz and Dirk A. Lorenz. [On conditions for convergence to consensus](#). *IEEE Transactions on Automatic Control*, 55(7):1651–1656, 2010. [arXiv:0803.2211](#)
8. Jae Kyun Shin and Jan Lorenz. [Tipping diffusivity in information accumulation systems: More links, less consensus](#). *Journal of Statistical Mechanics: Theory and Experiment*, 2010(06):P06005, 2010. [arXiv:0909.1252](#)
9. Jan Lorenz. [Heterogeneous bounds of confidence: Meet, discuss and find consensus!](#) *Complexity*, 15(4):43–52, 2010. [arXiv:0801.1399](#)
10. Jan Lorenz, Stefano Battiston, and Frank Schweitzer. [Systemic risk in a unifying framework for cascading processes on networks](#). *European Physical Journal B*, 71:441–460, 2009. [arXiv:0907.5325](#)
11. Jan Lorenz. [Universality of movie rating distributions](#). *European Physical Journal B*, 71:251–258, 2009. [arXiv:0806.2305](#)
12. Diemo Urbig, Jan Lorenz, and Heiko Herzberg. [Opinion dynamics: The effect of the number of peers met at once](#). *Journal of Artificial Societies and Social Simulation*, 11(2):4, 2008
13. Jan Lorenz and Stefano Battiston. [Systemic risk in a network fragility model analyzed with probability density evolution of persistent random walks](#). *Networks and Heterogeneous Media (NHM)*, 3(2):185–200, 2008. [arXiv:0711.1784](#)
14. Jan Lorenz. [Continuous Opinion Dynamics under bounded confidence: A Survey](#). *Int. Journal of Modern Physics C*, 18(12):1819–1838, 2007. [arXiv:0707.1762](#)
15. Jan Lorenz and Diemo Urbig. [About the Power to Enforce and Prevent Consensus by Manipulating Communication Rules](#). *Advances in Complex Systems*, 10(2):251, 2007. [arXiv:0708.3244](#)
16. Jan Lorenz. [Consensus strikes back in the Hegselmann-Krause model of continuous opinion dynamics under bounded confidence](#). *Journal of Artificial Societies and Social Simulation*, 9(1):8, 2006
17. Jan Lorenz. [Continuous Opinion Dynamics of Multidimensional Allocation Problems under Bounded Confidence. More dimensions lead to better chances for consensus](#). *European Journal of Economic and Social Systems*, 19(2):213–227, 2006. [arXiv:0708.2923](#)
18. Jan Lorenz. [A stabilization theorem for dynamics of continuous opinions](#). *Physica A: Statistical Mechanics and its Applications*, 355(1):217–223, 2005. [arXiv:0708.2981](#)

Publications in Books and Conference Proceedings

19. Jan Lorenz. [Fostering Consensus in Multidimensional Continuous Opinion Dynamics under bounded Confidence](#). In Dirk Helbing, editor, *Managing Complexity: Insights, Concepts, Applications*, pages 321–334. Springer, 2008. [arXiv:0708.3172](#)
20. Jan Lorenz. [Fixed points in models of continuous opinion dynamics under bounded confidence](#). In A. Ruffing, A. Suhrer, and J. Suhrer, editors, *Communications of the Laufen Colloquium on Science 2007*. Shaker Publishing, 2007. [arXiv:0806.1587](#)
21. Jan Lorenz. [Convergence of Products of Stochastic Matrices with Positive Diagonals and the Opinion Dynamics Background](#). In *Lecture Notes in Computer Science: Positive Systems*, volume 341, pages 209–216. Springer, 2006. [arXiv:0708.3177](#)

22. Jan Lorenz. [Continuous opinion dynamics: Insights through interactive markov chains](#). In *Proceedings of IASTED Conference Modelling, Simulation and Optimization MSO, Oranjestaad, Aruba, 2005*. [arXiv:0708.3293](#)

Conference, Policy and Business Papers

23. Jan Lorenz and Frederico Menino. [Designing Participatory Budgeting: Mathematics of opinion dynamics and aggregation](#). Technical report, 2005
24. Hubert Ramke, Stefan Mues, and Jan Lorenz. [Vom Resteverkauf zum Verwertungsmanagement](#). *Der Versandhausberater*, 2004
25. Jan Lorenz. [Opinion Dynamics with Heterogeneous Bounds of Confidence for the Agents](#). In *Conference "WEHIA 2003", Institute for World Economics, Kiel, Germany, May 29-31, 2003*
26. Jan Lorenz. [Multidimensional Opinion Dynamics when Confidence Changes](#). In *Economic Complexity 2003 Aix-en-Provence, France, May 8-12, 2003*

Theses

27. Jan Lorenz. [Repeated Averaging and Bounded Confidence-Modeling, Analysis and Simulation of Continuous Opinion Dynamics](#). PhD thesis, Universität Bremen, 2007
28. Jan Lorenz. [Mehrdimensionale Meinungsdynamik bei wechselndem Vertrauen](#). Master's thesis, Universität Bremen, 2003

POSTERS

1. [Convergence to consensus in multiagent systems and groups of humans: Mathematical results and experimental findings](#), Interdisciplinary Workshop on Information and Decision in Social Networks, Massachusetts Institute of Technology (MIT), USA, May 31–June 1 2011
2. [Die "Weisheit der Masse"](#), Nacht der Wissenschaft Oldenburg, 24.9.2010
3. [Universality in Continuous Opinion Dynamics: Empirical studies of movie rating distributions](#), COST MP0801 "Physics of Conflicts and Competition" Annual Meeting, Rome, Italy, 2009
4. [Fostering Consensus in Multidimensional Continuous Opinion Dynamics under Bounded Confidence](#), Potentials for Complexity Science in Business, Government and the Media, Collegium Budapest, Hungary, 2006

SELECTED TALKS

1. [Crowd Wisdom and Deliberative Voting: Does Deliberation Improve Estimation Accuracy?](#), European Consortium for Political Research (ECPR) General Conference, University of Iceland, Reykjavik, Aug 25, 2011
2. [The Formation of Parties through Opinion Dynamics under Bounded Confidence: An Agent-based Model](#) (invited), Center for Comparative and International Studies (CIS) Colloquium, University of Zurich, Dec 16, 2010
3. [Die Weisheit der Masse gegen die Weisheit des Einzelnen: Eine Statistische Spielerei](#), ScienceSlam, Nacht der Wissenschaft, Carl von Ossietzky Universität Oldenburg, 24.9.2010
4. [Continuous Opinion Dynamics: Heterogeneous Bounds of Confidence, Movie Ratings, Wisdom of the Crowd; Results from Simulation, Online Data Analysis, and the Lab](#) (invited), Sociology Seminar, University of Groningen, Netherlands, 2010
5. [Mathematical ingenuity traced in the academic genealogy of mathematicians](#), Workshop "Modelling science – Understanding, forecasting, and communicating the science system", Amsterdam, Netherlands, 2009
6. [Continuous Opinion Dynamics under Bounded Confidence: A model to explain the formation of Parties?](#) (invited), Seminar Zentrum für Methoden der Sozialwissenschaften, Universität Oldenburg, Germany, 2009
7. [Growth in coupled multiplicative stochastic processes](#), International Workshop "The Physics Approach to Risk: Agent-based Models and Networks", Zurich, Switzerland, 2008
8. [Continuous Opinion Dynamics](#), International Workshop Sociophysics: Status and Perspectives, ISI Foundation, Torino, Italy, 2008
9. [Fostering Consensus in Continuous Opinion Dynamics under Bounded Confidence](#), Seminar "Modeling Socio-Economic Systems and Crisis", ETH Zurich, Switzerland, 2008
10. [Is there an Optimal Level of Globalization? Stochastic Fragility Dynamics with Trend Reinforcing](#), COST P10 "Physics of Risk" Annual Meeting, Palermo, Italy, 2007
11. [Continuous Opinion Dynamics under Bounded Confidence](#) (invited), Seminar "Large Graphs and Networks", UCL, Louvain la Neuve, Belgium, 2007
12. [Threshold models of Continuous Opinion Dynamics: Clustering, Drifting, Convergence](#) (invited), Seminar "Interdisciplinary Physics", IFISC, Palma de Mallorca, Spain, 2007
13. [Difference Equations in Continuous Opinion Dynamics under Bounded Confidence](#), Progress on Difference Equations, Laufen/Salzburg, Germany/Austria, 2007

14. [Wiederholtes Mitteln bei beschränktem Vertrauen: Modellierung, Analyse und Simulation von kontinuierlicher Meinungsdynamik](#), Vortrag zum Promotionskolloquium, Bremen, Germany, 2007
15. [Wie man das Erreichen eines Konsenses fördert](#) (invited), Seminar “Effizienz dezentraler Strukturen” Universität Bayreuth , Germany, 2006
16. [Convergence of products of stochastic matrices with positive diagonals and the opinion dynamics background](#), POSTA Positive System: Theory and Application, Grenoble, France, 2006
17. [Fostering Consensus](#), Potentials for Complexity Science in Business, Government and the Media, Collegium Budapest, Hungary, 2006
18. [About the power to enforce and prevent consensus](#), DPG Spring Meeting, Arbeitskreis Physik sozio-ökonomischer Systeme, Dresden, Germany, 2006
19. [Continuous opinion dynamics of multidimensional allocation problems under bounded confidence](#), 12th International Meeting: Connectionist Approaches in Economics and Management - ASCEG, Aix-en-Provence, France, 2005
20. [Continuous opinion dynamics: Insights through Interactive Markov Chains](#), IASTED Conference: Modelling, Simulation, and Optimization, Aruba, 2005

PUBLIC
RESPONSE

[The Sociomomist Are Crowds Wise or Mad?](#), Alan Hall, June, 2011

[World Radio Switzerland](#) [ETH researcher explains study showing one mind can be wiser than two](#), Interview with Heiko Rauhut, June 14, 2011

[The Wall Street Journal](#) [When We’re Cowed by the Crowd](#), Jonah Lehrer, May 28, 2011

[Handelszeitung](#) [Die Massen lassen sich verführen](#), May 23, 2011

[lesaffaires.com](#) [Blogues Avez-vous une influenec néfaste?](#), Olivier Schmouker, May 19, 2011

[DePers.nl](#) [Afkijken maakt massa dom](#), Marcel Hulspas, May 19, 2011

[TVB Television Broadcast](#) [Media Makes Us Stupid](#), May 19, 2011

[Bay Windows](#) [Reality Check: Just how smart is the “wisdom of the crowd” in the age of the Internet?](#), Jeff Epperly, May 18,2011

[ars technica](#) [Social influences kill the wisdom of the crowd](#), John Timmer, May 18,2011

[The Atlantic](#) [Here’s an Article on the Dangers of Shared Information—Share It!](#), Derek Thompson, May 17, 2011

[USA TODAY](#) [So much for the wisdom of the crowd](#), Dan Vergano, May 17, 2011

[science.ORF.at](#) [Wenn die Masse ihre Weisheit verliert](#), Elke Ziegler, May 18,2011

[SPIEGEL online](#) [Gemeinsam sind wir dmmmer](#), Holger Dambeck, May 17.5.2011

[genevalunch.com](#) [Zurich researchers say social crowd influence dumbs us down](#), Ellen Wallace, May 17, 2011

[Scientific American](#) [60 Second Science Podcast Wisdom of Crowds Withers with Peeks](#), Karen Hopkin, May 16,2011

[WIRED Science](#) [Sharing Information Corrupts Wisdom of Crowds](#), Brandon Keim, May 16, 2011

[TV documentary](#) [3sat neues: Crowd Wisdom - Die Weisheit der Vielen](#), 3sat 20.6.2010; asks me as expert on aggregation of the wisdom of crowds

[TV documentary](#) [Schwärme: Die Intelligenz der Massen](#), arte 25.9.2009, 19:00; shows an experiment on opinion dynamics and the wisdom of crowds (designed and conducted by Jan Lorenz, Heiko Rauhut, Dirk Helbing, Frank Schweitzer)

[Show, pi x Deutschland](#) - Die Abschlussveranstaltung im [Jahr der Mathematik](#), EXPO XXI, Köln, Germany, 11.12.2008; acted as expert for “Mathematik und Schwarmintelligenz”

[Science Blogs](#), [Schwarmintelligenz auch beim Menschen? Großversuch beim ViertelFest in Bremen](#), 27.8.2008

[scinexx](#) - [Das Wissensmagazin](#), [Schwarmintelligenz auch beim Menschen? Großversuch beim ViertelFest in Bremen](#), 18.8.2009

[Show](#), [KnickKnack Schwärmen für das ViertelFest - die Intelligenz der Knackinsekten](#), ein mathematisches Massenselbstorganisationsexperiment auf dem ViertelFest, Bremen, Germany, 22.-24. August 2008; acted as advisor and expert on stage

[Press release](#) [Countdown für Bremer Großversuch zu Schwarmintelligenz: Wie viel Hering steckt im Menschen?](#), Nr. 250, 15.8.2008, Universität Bremen

PROFESSIONAL	<p>atways AG – business consultants Hamburg, Germany, <i>Internship Business</i></p> <p>WildwuX Theater Aktion European Tour (D,A,I,SLO,HU,CZ, 25 km/h), <i>Actor and Organizer</i></p> <p>Juggler (3 Balls, 3 Clubs, Clubswinging) <i>Freelancer (Workshop teacher and Performer)</i></p>	<p>Sep 2003 – Dec 2003</p> <p>Apr 2001 – Sep 2001</p> <p>Apr 1997 – Mar 1998</p>
HONORARY	<p>Bund Deutscher PfadfinderInnen, BDP Landesverband Bremen-Niedersachsen, <i>Vorstand</i> (partly alone, 6 employees)</p>	<p>1999 – 2007</p>
SOME OTHER PROJECTS	<ul style="list-style-type: none"> • Performance Theatre Initiator and organizer of several theatre projects. Main concept: Develop a performance, which gives insight to the topic, by using the live situation of a theatre play. Have fun by developing characters and stories. Examples: <ul style="list-style-type: none"> • Olympic Shopping (2003) A group of young people on its way to implement Shopping as an olympic discipline to save the German economy by pushing consumption. Team-Shopping matches in real supermarkets. • TVtainment – About the television in you (2004) Testing a new reality TV show concept. A group of people and 50 studio guests are shown on TV while they are watching TV. Games, Zapping and having fun until one member freaks out and hijacks the show by taking the host as hostage. • Living on Trees (1999, 2000) Initiator of two tree camps: Build a camp on trees and live there for three days and four nights without a step on the earth. • Board Games Championship Participation in the team tournament 2002. Achieved the 3rd place on the German level and the 4th place in Europe. I believe that there is something to learn from the board games developing and playing community for the design of modern business and politics. 	