

## *Curriculum Vitae*

**Dr. Wolfgang Pietsch, Dipl.-Phys.**

Philosophy of Science  
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### RESEARCH INTERESTS

Scientific method  
Philosophy of probability  
Philosophical aspects and history of physics  
Philosophy of space and time

### EMPLOYMENT

**Technical University Munich , Philosophy**  
(4/2008-present)  
Wissenschaftlicher Mitarbeiter (research assistant)

**University of Augsburg, Philosophy** (1/2008-3/2008)  
Wissenschaftlicher Mitarbeiter

### ACADEMIC EDUCATION

**University of Pittsburgh**  
**Center for Philosophy of Science**  
(20/3/2010-15/4/2010)  
short-term visit

**London School of Economics,**  
**Centre for Philosophy of Natural and Social Science**  
(10/2006-6/2007)  
Visiting Research Associate

**University of Augsburg** (11/2004-5/2008)  
PhD (Philosophy)  
Grade: magna cum laude

Thesis: Der Zeitpfeil – philosophische und physikalische  
Grundlagen (The arrow of time—philosophical  
and physical foundations)  
Supervisor: Prof. Klaus Mainzer

**Freie Universität Berlin** (2003-4)  
Studies in Science Writing

Degree: University Certificate

**Humboldt-Universität zu Berlin** (1997-2003)  
Diplom (M.Sc. Physics)  
Grade: 1,0 (with distinction)

Thesis in statistical physics: Correlations and percolation  
in scale-free networks  
Examiners: Prof. Igor Sokolov, Prof. Werner Ebeling

**Université Paul Sabatier of Toulouse (F)** (2000)  
Exchange semester with the Erasmus Program of the EU

**Lessing-Gymnasium Neu-Ulm**  
Abitur  
Grade: 1,0

#### SCHOLARSHIPS AND AWARDS

POIESIS Fellow (New York Institute for Public  
Knowledge, BMW Stiftung Herbert Quandt, Gerda  
Henkel Stiftung) with an annual stipend of  
5000 Euro (2010, 2011)

Best graduate paper award for a paper presented at the  
conference *Reduction and the Special Sciences* (Tilburg,  
April 2008)

Fellow of the Evangelisches Studienwerk Villigst e.V.  
PhD-Scholarship for full time study (1/2006-12/2007)

Travel stipends from Evangelisches Studienwerk,  
DAAD, DFG

#### PUBLICATIONS

WP, “Underdetermination or why the historical  
perspective makes a difference”, forthcoming in  
*Proceedings of EPSA2009, 2<sup>nd</sup> International Congress  
of the European Philosophy of Science Association*.  
Dordrecht: Springer.

WP, “The underdetermination debate: How lack of  
history leads to bad philosophy”, forthcoming in T.  
Schmaltz & S. Mauskopf (eds.), *Integrating History and  
Philosophy of Science. Boston Studies in the Philosophy  
of Science (Vol. 263)*. Dordrecht: Springer.

WP, “Varieties of pluralism in the interpretation of probability”, forthcoming in *Proceedings of the 7<sup>th</sup> International Conference of the German Society for Analytic Philosophy (GAP)*.

WP, “On conceptual issues in classical electrodynamics: Prospects and problems of an action-at-a-distance interpretation”, *Studies in History and Philosophy of Modern Physics* 41(1), 67-77 (2010).

WP, “Limiting frequencies in scientific reductions” in Leitgeb, J. and A. Hieke, *Reduction and Elimination in Philosophy and the Sciences. Proceedings of the 31<sup>st</sup> International Ludwig Wittgenstein-Symposium*, 256-258. Kirchberg: ÖLWG (2008).

WP, “Derivation of the percolation threshold for the network model of Barabási and Albert”, *Phys. Rev. E* 73, 066112 (2006).

Ramon Xulvi-Brunet, WP, & Igor Sokolov, “Correlations in scale-free networks: tomography and percolation”, *Phys. Rev. E* 68, 036119 (2003).

#### UNDER CONTRACT

“Philosophy of Physics in Germany”. Edited Volume of *Journal for General Philosophy of Science* (Springer). (together with Meinard Kuhlmann)

#### PRESENTATIONS

“The limits of probabilism”, *EPSA11 - 3<sup>rd</sup> Congress of the European Philosophy of Science Association* (Athens, October 2011)

“The limits of probabilism”, *14<sup>th</sup> Congress of Logic, Methodology and Philosophy of Science* (Nancy, July 2011)

“The limits of Bayesian epistemology”, *Annual Conference of British Society for the Philosophy of Science* (Brighton, July 2011)

“The neglect of analogy”, *Biennial Conference of Society for Philosophy of Science in Practice* (Exeter, June 2011)

“Are physical theories probable?”, *DPG-Frühjahrstagung* (Dresden, March 2011)

“The heuristic value of underdetermination: On discovery by theoretical analogy”, *Heuristiken in der Physik* (Bad Honnef, December 2010)

“How robots think? On inductive logic”, *PhiBot10 – Philosophy Meets Robotics* (München, October 2010)

“Transient underdetermination and 19<sup>th</sup> century electrodynamics”, *16<sup>th</sup> UK and European Meeting on the Foundations of Physics* (Aberdeen July 2011)

“Wozu Philosophie der klassischen Physik und warum gerade in Deutschland”, *Philosophie der Physik in Deutschland – Bestandsaufnahme und Perspektiven* (Bremen, June 2010)

“Transient underdetermination and 19<sup>th</sup> century electrodynamics”, Pittsburgh Center for Philosophy of Science (March 2010)

“Underdetermination or why the historical perspective makes a difference”, *EPSA 2009* (Amsterdam, October 2009)

“Varieties of pluralism in the interpretation of probability”, *Foundations of Uncertainty: Probability and its Rivals* (Prague, September 2009)

“Varieties of pluralism in the interpretation of probability”, *GAP7* (Bremen, September 2009)

“Reversibility as regulative principle”, invited talk at the Institute of Philosophy, TU Dortmund (July 2009)

“Commentary on Bengt Autzen: Bayesianism and the Principal Principle”, *Philosophy of Probability II* Graduate Conference (London School of Economics, June 2009)

“Underdetermination or why &HPS makes a difference”, *2<sup>nd</sup> Conference on Integrated History and Philosophy of Science (&HPS2)* (Univ. of Notre Dame, March 2009)

“Metaphysics and the interpretation of probability”, *Frühjahrskonferenz der Deutschen Physikalischen Gesellschaft / AK Philosophie der Physik* (München, März 2009)

“Limiting frequencies in scientific reductions”, *31<sup>st</sup> International Ludwig Wittgenstein-Symposium* (Kirchberg, August 2008)

“Warum die Frage nach der Reversibilität der physikalischen Grundgleichungen eine physikhistorische ist.”, invited talk at the *Oberseminar zur Philosophie der Naturwissenschaften*, University of Bremen (July 2008)

“Reversibility reconsidered—a role for history”, presented at *Third International Conference on the Nature and Ontology of Spacetime* (Montreal, June 2008)

“Two electrodynamics between plurality and reduction”, presented at *Reduction and the Special Sciences* (Tilburg, April 2008)

“Why boundary conditions can be laws”, presented at *Spring Conference of the German Physical Society AK Philosophie der Physik* (Freiburg, March 2008)

“Boltzmanns Zeitpfeil”, invited talk at *Kolloquium zur Geschichte der Naturwissenschaften, Mathematik und Technik*, Universität Hamburg (January 2008)

“Boltzmann's H-theorem and the subjectivity of statistical dependence”, presented at *13<sup>th</sup> International Congress of Logic, Methodology, and Philosophy of Science* (Beijing, August 2007)

“The subjectivity of statistical dependence”, presented at the *annual conference of the British Society for the Philosophy of Science* (Bristol, July 2007)

“Equilibrium and non-equilibrium. What's the difference and what can we learn from it?”, presented at a *mini-workshop on the philosophical foundation of statistical mechanics* at London School of Economics (January 2006)

## TEACHING

### **Technische Universität München**

Introduction to Philosophy of Science (WS 10/11, SS 10, WS 09/10, SS 09, WS 08/09, SS 08)

On Probability and Induction (WS 10/11, WS 09/10)

Philosophy of Engineering (WS 10/11) (with Klaus Mainzer and Fred Slanitz)

Introduction to Academic Research for Architects (WS 10/11) (with Alain Thierstein)

Physics and Metaphysics (SS 10)

What is Space? (SS 09)

Kant's Philosophy of Natural Science (WS 08/09)  
Philosophy and History of Probability (WS 08/09, SS 08)

Research Methods  
(Trainings for PhD-students of the TUM Graduate School, November 2009, and for PhD-students of the International Graduate School of Science and Engineering (IGSSE), June 2009)

Philosophy of Science for Engineers  
(Workshop for PhD students at a chair of mechanical engineering at TU München, February 2009)

### **Universität Augsburg**

Introduction to Philosophy of Science (WS 07/08)

### WORKSHOPS ETC.

Co-organizer of “Herbstworkshop der Arbeitsgruppe Philosophie der Physik (AG Phil) der Deutschen Gesellschaft für Physik (DPG)”, TU München, 10.-11.9. 2011 (with Meinard Kuhlmann)

Organization of a Workshop “Philosophy of Probability in Physics”, TU München, 20.7.2009

Co-organizer of a student reading group on the foundations of quantum mechanics at LSE (with Foad Dizadji-Bahmani)

### SCIENCE WRITING

Freelance science writing (occasionally 2004-6) for Inforadio of Rundfunk Berlin Brandenburg, Deutschlandfunk, Berliner Zeitung

Editorial assistance with “100x Einstein”, a year-long series covering all aspects of Einstein’s life and work in features, quotes, and original documents on rbb Inforadio (World Year of Physics, Einsteinjahr 2004-5)

Internship as a science writer at rbb Inforadio (September/October 2004)

Internship at the regional newspaper Südwest Presse Ulm (March 2004)

LANGUAGE SKILLS

Fluent in German, English, French  
Intermediate in Spanish, Russian