

PUBLICATIONS

Peer-Reviewed Journal Articles

Forthcoming: 'Mind the Gap: Boltzmannian versus Gibbsian Equilibrium'. **Philosophy of Science**.

Forthcoming: 'Model Selection Theory. The Need for a More Nuanced Picture of Double-Counting and Use-Novelty'. **The British Journal for the Philosophy of Science**. [with K. Steele]

Forthcoming: 'The Diversity of Model Tuning Practices in Climate Science'. **Philosophy of Science**. [with K. Steele]

2016: 'On Defining Climate and Climate Change'. **The British Journal for the Philosophy of Science** 67 (2), 337-364.

2015: 'Introduction to Philosophy of Climate Science, Part 2: Modelling Climate Change'. **Philosophy Compass** 10 (12), 965-977. [with R. Frigg and E. Thompson]

2015: 'Introduction to Philosophy of Climate Science, Part 1: Observing Climate Change'. **Philosophy Compass** 10 (12), 953-964. [with R. Frigg and E. Thompson]

2015: 'Rethinking Boltzmannian Equilibrium'. **Philosophy of Science** 82 (5), 1224-1235. [with R. Frigg, but Werndl is first author]

2015: 'Reconceptualising Equilibrium in Boltzmannian Statistical Mechanics'. **Studies in History and Philosophy of Modern Physics** 49, 19-31. [with R. Frigg, but Werndl is first author]

2015: 'Model tuning in engineering: uncovering the logic'. **The Journal of Strain Analysis for Engineering Design**. [with K. Steele]

2013: 'Justifying Typicality Measures of Boltzmannian Statistical Mechanics and Dynamical Systems'. **Studies in History and Philosophy of Modern Physics** 44 (4), 470-479.

2013: 'Climate Models, Confirmation and Calibration'. **The British Journal for the Philosophy of Science** 64, 609-635. [with K. Steele]

2013: 'On Choosing Between Deterministic and Indeterministic Models: Underdetermination and Indirect Evidence'. **Synthese** 190 (12), 2243-2265.

2012: 'Demystifying Typicality'. **Philosophy of Science** (5) 917-929. [with R. Frigg]

2012: 'Evidence for the Deterministic or the Indeterministic Description? -- A Critique of the Literature about Classical Dynamical Systems'. **Journal for General Philosophy of Science** 43 (2), 295-312.

2012: 'On the History of the Isomorphism Problem of Dynamical Systems With Special Regard to von Neumann's Contribution.' **Archive for History of Exact Sciences** 66 (1), 71-93.

2011: 'Explaining Thermodynamic-Like Behaviour in Terms of Epsilon-Ergodicity'. **Philosophy of Science** 78 (4), 628-652.

2011: 'On the Observational Equivalence of Continuous-Time Deterministic and Indeterministic Descriptions'. **European Journal for the Philosophy of Science** 1 (2), 193-225.

2009: 'Are Deterministic Descriptions and Indeterministic Descriptions Observationally Equivalent?'. **Studies in History and Philosophy of Modern Physics** 40, 232-242.

2009: 'Justifying Definitions in Mathematics -- Going Beyond Lakatos'. **Philosophia Mathematica** 17, 313-340.

2009: 'What are the New Implications of Chaos for Unpredictability?'. **The British Journal for the Philosophy of Science** 60, 195-220.

2008: 'The Evolutionary Foundation of Popper's Concept of Three Worlds: a Neglected Perspective of Human Ecological Research'. **Geographische Zeitschrift** 94 (3), 129-142. [with M. Schafranek, F. Huber]

Peer-Reviewed Contributions in Books

Forthcoming: 'Stochastic Boltzmann Equilibrium?'. In: M. Massimi and van Romeijn, J.-W. (eds), *Duesseldorf 2015: The European Philosophy of Science Association Proceedings*. [with R. Frigg, but Werndl is first author]

Forthcoming: 'When Does a Boltzmannian Equilibrium Exist?'. In: D. Bendingham, O. Maroney and C. Timpson (eds), *Quantum Foundations of Statistical Mechanics*. Oxford University Press. [with R. Frigg, but Werndl is first author]

Forthcoming: 'Determinism'. In: M. Griffith, T. Neil and K. Timpe (eds), *Routledge Companion to Free Will*. Routledge.

Forthcoming: 'Philosophie der Klimawissenschaften'. In: T. Reydon and S. Lohse (eds), *Die Philosophie der Einzelwissenschaften*. Meiner Verlag [with R. Bradley, R. Frigg, K. Steele and E. Thompson]

2015: 'Determinism and Indeterminism'. In: P. Humphreys (ed), *Oxford Handbook for the Philosophy of Science*. Oxford University Press.

2012: 'Probability, Indeterminism and Biological Processes'. In: D. Dieks, J.G. Wenceslao, S. Hartmann, M. Stoeltzner, and M. Weber (eds), *Probabilities, Laws and Structures*. The Philosophy of Science in a European Perspective, Volume 3. Springer, 263-277.

2012: 'A New Approach to the Approach to Equilibrium'. In: Y. Ben-Menahem and M. Hemmo (eds), *Probability in Physics*. The Frontiers Collection. Springer, 99-114. [with R. Frigg]

2012: 'Observational Equivalence of Deterministic and Indeterministic Descriptions and the Role of Different Observations'. In: Hartmann, S., Okasha, S. and De Regt, H., (eds), *Proceedings of the Second Conference of the European Philosophy of Science Association*. Springer, 427-439.

2011: 'Entropy - A Guide for the Perplexed'. In: C. Beisbart and S. Hartmann (eds), *Probabilities in Physics*. Oxford University Press, 115-142.

2009: 'The Formulation and Justification of Mathematical Definitions Illustrated by Deterministic Chaos'. In: M. Suarez, M. Dorato and M. Rédei (eds), *Philosophical Issues in the Sciences: Launch of the European Philosophy of Science Association*. Springer, 279-288.

Other Contributions in Books

Forthcoming: 'Kontroversen zur Schätzung und Prognosefähigkeit am Beispiel globaler Klimawandel sowie wirtschaftswissenschaftlicher Vorhersagestudien'. In: R. Bachleitner, M. Weichbold und M. Pausch (eds), *Wissenschaftstheoretische und methodologische Problemlagen empirischer Voraussagen und statistischer Vorhersagen*. Springer. [with F. Huber]

2009: 'Deterministic Versus Indeterministic Descriptions: Not That Different After All?'. In: A. Hieke and H. Leitgeb (eds), *Reduction, Abstraction, Analysis*. Ontos, 63-78.

Book Reviews

2016: Review: "The Precautionary Principle: Science, Evidence and Environmental Policy"

(Daniel Steel). *Economics and Philosophy* 32 (1), 162-169.

2013: 'Do Microbes Question Standard Thinking in the Philosophy of Biology?' Critical Notice of "Processes of Life -- Essays in the Philosophy of Biology" (John Dupre). *Analysis* 73 (2), 380-387.

2013: 'Are All Probabilities in Statistical Mechanics Transition Probabilities?' Review of "The Road to Maxwell's Demon -- Conceptual Foundations of Statistical Mechanics" (Meir Hemmo and Orly Shenker). *Notre Dame Philosophical Reviews*.

2010: 'The Simple Behaviour of Complex Systems Explained?' Review of "Bigger Than Chaos, Understanding Complexity Through Probability" (Michael Strevens). *The British Journal for the Philosophy of Science* 61 (4), 875-882

2005: Rezension: "Rationalitaet in der Angewandten Ethik" [Review of "Rationality in Applied Ethics"] (Pavel Fobel, Gerhard Banse, Andrzej Kiepas, Gerhard Zecha (Hg)). *Kriterion - Journal of Philosophy* 19. [with Angelberger, A.J.J., Armstrong, B., Berger, W.F. and Gratzl, N.]