

# GWP.2022: The Fourth International Conference of the German Society for Philosophy of Science

Technische Universität Berlin, Straße des 17. Juni 135 (Main building), Berlin-Charlottenburg

**Monday, 15th August 2022**

09:00-09:15	H0105 (Audimax) Opening Remarks: Gerhard Schurz, GWP President Axel Gelfert, Chair, Local Organizing Committee  Welcome Adress: Stephan Völker, Erster Vizepräsident, TU Berlin					
09:15-10:45 Plenary	H0105 (Audimax) <b>Hans Rott: “Relevance and Conditionals”</b> – Chair: Gerhard Schurz					
10:45-11:00	Coffee break					
11:00-13:00 Parallel sessions: Contributed papers & symposia		H0104 <b>Observation and Measurement</b>  Matthew Lund. <i>Bessel and the Epistemology of Observational Relativity</i>  Siska De Baerdemaeker. <i>Exploratory observations with stellar streams</i>	H1058 <b>SYMPOSIUM Mechanisms in the Cognitive and Social Sciences</b>  Yafeng Shan, Jon Williamson, Beate Krickel	H3005 <b>Philosophy of Economics, Game Theory, and the Business of Science</b>  Jules Salomone-Sehr and Sacha Bourgeois-Gironde. <i>What Might We Learn About Shared Agency Thanks to Game Theory?</i>  Edoardo Peruzzi and Gustavo Cevolani. <i>Defending (de-) idealization in economic modelling: a case study</i>	H3006 <b>Models and Representations</b>  David Hommen. <i>Poetry and Truth – Scientific Models as Perspicuous Representations</i>  Julia Sanchez-Dorado. <i>Judgments of similarity and a pragmatic account of representation</i>  William D'Alessandro. <i>Unrealistic Models in Mathematics</i>	H3010 <b>SYMPOSIUM The Replication Crisis and Philosophy of Science</b>  Sophia Crüwell, Adrian Erasmus, Johanna Sarisoy

13:00-14:30	Lunch break					
14:30-17:10 Parallel sessions: Contributed papers	<p>H0104</p> <p><b>Philosophy of Physics (1)</b></p> <p>Niels Martens. <i>Comparing the explanatory power of <math>\Lambda</math>CDM &amp; modified gravity</i></p> <p>Frida Trotter. <i>Breaking underdetermination with norms</i></p> <p>Iulian Toader. <i>Einstein Completeness as Categoricity</i></p> <p>Tina Wachter. <i>Does Referencing in QM Require Free Logic?</i></p>	<p>H1058</p> <p><b>Laws of Nature</b></p> <p>Christian Loew, Siegfried Jaag and Michael Hicks. <i>The normative relevance of laws of nature</i></p> <p>Mousa Mohammadian. <i>An Armstrongian Defense of Dispositional Monist Accounts of Laws</i></p> <p>Markus Schrenk. <i>Which Predicates, which Properties for Better Best Systems?</i></p> <p>Vassilis Livanios. <i>Thin Powers and the Governing Problem</i></p>	<p>H2013</p> <p><b>Epistemology of Science</b></p> <p>Lara Huber. <i>Epistemic Significance: Broadening the Perspective</i></p> <p>Daniel Minkin. <i>Conspiracy Theories: Some Teachings from Philosophy of Science</i></p> <p>Lorenzo Spagnesi. <i>Idealization and Knowledge of Nature: A Kantian Approach</i></p> <p>Noelia Iranzo Ribera. <i>Counternomic Reasoning as Make-Believe</i></p>	<p>H3005</p> <p><b>Historical Perspectives</b></p> <p>Stephan Fischer. <i>Zur Konzeption der Globalgeschichte</i></p> <p>Filip Buyse. <i>The Physiologist Johannes Peter Müller and the Philosopher Spinoza: An Underestimated Relation</i></p> <p>Yuval Eytan. <i>Hobbes on Scientific Happiness</i></p> <p>Idit Chikurel. <i>Maimon as a Baconian: Induction, Empirical Objects and Natural Histories</i></p>	<p>H3006</p> <p><b>Scientific Realism and the Practices of Science</b></p> <p>Raimund Pils. <i>Scientific Realism and Epistemic Risk</i></p> <p>Matthias Egg. <i>Quantum Fundamentalism vs. Scientific Realism</i></p> <p>Sébastien Rivat. <i>How Theoretical Terms Effectively Refer</i></p> <p>Enno Fischer. <i>Naturalness: a Constitutive Principle</i></p>	<p>H3010</p> <p><b>Science in its Social Context</b></p> <p>Anna Leuschner and Manuela Fernández Pinto. <i>Research on Shooting Bias: Social and Epistemic Problems</i></p> <p>Olivier Ouzilou. <i>Social sciences and conspiracy theorizing: the problem of collective entities</i></p> <p>Simon Blessenohl and Deniz Sarikaya. <i>A Norm for Science Advice: Making Beliefs Accurate</i></p> <p>Luca Malatesti, Marko Jurjako and Inti Brazil. <i>Integrating legal categories with biocognitive data: the case of the insanity defence</i></p>
17:10-17:30	Break					
17:30-19:00 Plenary	<p>H0104</p> <p><b>Mazviita Chirimuta: “Formal Idealism/Haptic Realism” – Chair: Holger Lyre</b></p>					

19:00-19:15	Break
19:15-22:00	Conference dinner Café Hardenberg

## Tuesday, 16th August 2022

09:00-10:30 Plenary	H0105 (Audimax) Jutta Schickore: “Causation, Observation, and Experiment: Reflections on Practical Inquiry in the German Lands Around 1800” – Chair: Alexander Gebharter						
10:30-11:00	Coffee break						
11:00-13:00 Parallel sessions: Contributed papers & symposia	H0104	H0105	H1058	H2013	H3005	H3006	H3010
	<b>28 – SYMPOSIUM The Cybernetic Renaissance</b>  Hajo Greif, Wiktor Rorot, Krzysztof Dolega	<b>Science and Values (1)</b>  Jacob Stegenga and Tarun Menon. <i>A New Defence of the Value- Free Ideal</i>  Jitka Paitlova. <i>The value of value neutrality</i>  Torsten Wilholt. <i>Symmetries and Asymmetries in Epistemic Risk Management</i>	<b>Psychology and Psychiatry</b>  Lena Kästner. <i>Multiplexes: New Directions for Computational Psychiatry?</i>  Mario Santos-Sousa. <i>Progress in Psychiatry</i>  Antonella Tramacere. <i>Has the evolutionary study of the mind reached an impasse?</i>	<b>Mind, Method, Mechanism</b>  Daniel Kostic and Willem Halffman. <i>Explanatory imperialism: empirical evidence for the claims about pervasiveness of “mechanisms” in life sciences</i>  Barnaby Crook. <i>The Compact Core - Emergent Structure Distinction in Artificial and Biological Neural Networks</i>	<b>Organisms and Superorganisms</b>  Spyridon Koutroufinis. <i>The Phenomenon of Organism – Three Different Levels of Analysis</i>  Antonio Danese. <i>Flowers and Teleology</i>  Ana Katic. <i>The Dynamical Biological Explanation: A New Perspective for the Concept of Superorganism</i>	<b>123 – SYMPOSIUM The Legitimacy of Generalizing Darwinism</b>  Hugh Desmond, Agathe du Crest, Philippe Huneman, Martina Valkovic, Thomas Reyond, André Ariew	<b>Method Transfer Across Disciplines and Scales</b>  Christian J. Feldbacher-Escamilla and Philipp Haueis. <i>Patchwork Approaches to Concepts and Different Scales</i>  Catherine Herfeld and Dunja Seselja. <i>Challenges to Methodology Transfer in Science</i>  Aznavur Dustmamatov.

				Lukas J. Meier. <i>Thought Experimentation as a Scientific Method</i>			<i>Geography as Science: The Limits of the Geo-Ontological Approach</i>
13:00-14:30	Lunch break						
14:30-17:10 Parallel sessions: Contributed papers	<b>H0104</b> <b>Engineering, Technology, Simulation</b>  Christopher Pincock and Michael Poznic. <i>What do engineers understand? The case of biological methanation</i>  Céline Gressel. <i>The Usage of Extended Reality Technologies in the Contexts of a healthy Life and their Impact on Well-being</i>  Dawid Kasprowicz, Daniel Wenz and Gabriele Gramelsberger. <i>How to Explore Scientific Code? (in Philosophy of Science)</i>  Marianne van Panhuys and Rafaela Hillerbrand. <i>Epistemic risks and</i>	<b>H0105</b> <b>Causal Methods</b>  Samuel Fletcher. <i>Causal Modeling as Counterfactual Semantics</i>  Paul M. Näger. <i>Evidence for interactive common causes. Resuming the Cartwright-Hausman-Woodward debate</i>  Donal Khosrowi. <i>Extrapolating Causal Effects - Where Is Our Theory of Confidence?</i>  Jan Borner. <i>Causal Power Quantified - A Generalisation and Defense of Cheng's Causal Power Measure</i>	<b>H1058</b> <b>The Social Organization of Science</b>  Vlasta Sikimić. <i>Efficient Team Structures in Biology</i>  K. Brad Wray. <i>The Epistemic Significance of the Size of Research Teams</i>  Li-An Yu. <i>Epistemic injustice of climate change: the coherence problem of specific and general information</i>  Sacha Ferrari. <i>Uberized science is the new black</i>	<b>H2013</b> <b>Philosophy of Physics (2)</b>  Ryan Miller. <i>Mereological Atomism's Quantum Problems</i>  David Schroeren. <i>State-Space-First Ontology: An Escape from the Pessimistic Meta-Induction?</i>  Marco Forgione. <i>Feynman: Visualization and Understanding of Quantum Phenomena</i>		<b>H3006</b> <b>Philosophy of Biology</b>  Rose Trappes. <i>The Pervasiveness of Sex in Behavioural Ecology</i>  Franziska Reinhard. <i>Re-Construction or Re-Invention? Experimental Research into the Origins of Life</i>  Vito Balorda and Predrag Šustar. <i>Natural Selection: Pathway or Mechanism? Insights from Cancer Research</i>  Aleksandar V. Božić. <i>Explaining the vagueness of life: „individuals thinking“ vs. natural kinds approach</i>	<b>H3010</b> <b>General Philosophy of Science (1)</b>  Ludwig Fahrbach. <i>The abundance of scientific evidence for our best theories: Too much of a good thing?</i>  Jens Harbecke. <i>Mechanistic Constitution as a Natural Law</i>  Anne Sophie Meincke. <i>Free Will and the Metaphysics of Agency</i>  Qiu Lin. <i>Du Châtelet on Mechanical Explanation vs. Physical Explanation</i>

	<i>computer simulation: a case study from particle physics</i>						
17:10-17:30	Break						
17:30-19:00 Plenary	H0105 (Audimax) <b>Anjan Chakravartty: “The Role of Epistemic Stances in Interpreting Science: Naturalistic Challenges”</b> – Chair: Axel Gelfert						
19:00-19:15	Break						
19:15-...	H0104 <b>General Assembly</b>						

### Wednesday, 17th August 2022

09:00-10:30 Plenary	H0105 (Audimax) <b>Branden Fitelson: “Bayesianism &amp; Explanationism”</b> – Chair: Christian Feldbacher-Escamilla						
10:30-11:00	Coffee break						
11:00-13:00 Parallel sessions: Contributed papers & symposia	H0104 <b>Explanation (1)</b> Stefan Roski. <i>In Defence of Explanatory Realism</i>  Alexander Gebharter and Christian J. Feldbacher-Escamilla. <i>Unification and Explanation: A causal perspective</i>	H0105 <b>Evolution</b> Marcel Weber. <i>Modeling Modality: The Case of Evolvability in Evo-Devo</i>  Leon de Bruin and Daniel Kostic. <i>How evolutionary and environmental factors shape the relationship</i>	H1058 147 – <b>SYMPOSIUM Learning from Data: The Secret to Success</b>  Tom Sterkenburg, Konstantin Genin, Francesca Zaffora Blando	H2013 <b>Mathematics</b> Daniel Koenig. <i>The Objectivity of Mathematics. On the Reception of 19th-Century Mathematics in Ernst Cassirer's Philosophy of Culture.</i>	H3005 <b>Logic and Language</b> Ivan Nanchev and Benjamin Wilck. <i>Linguistic versus Metalinguistic Testing in Schizophrenia Research</i>  Sebastian Sunday Grève. <i>Turing's Philosophy of Intelligence</i>	H3006 108 – <b>SYMPOSIUM Are all Law of Physics Created Equal?</b>  Salim Hirèche, Niels Linnemann, Robert Michels, Lisa Vogt, Andreas Bartels	H3010 <b>Bayesian Approaches</b>  Thomas Blanchard and Andreas Hüttemann. <i>Causal Bayes Nets, Causal Exclusion, and Symmetric Dependence</i>

	Martina Blečić and Predrag Šustar. <i>Biological Metaphors as Vehicles for Explanation?</i>	<i>between structural functional connectivity</i> Inigo Ongay de Felipe. <i>What is the role of Philosophy of Biology with regard to the Extended Evolutionary Synthesis and why should it matter</i>		Deborah Kant. <i>Deep peer disagreement in set theory</i>  Michael Friedman. <i>On Grothendieck's philosophy of mathematics and nautical metaphors</i>	Benjamin Wilck. <i>Logic and Language in Euclid's "Elements"</i>		Christoph Merdes. <i>Learning Source Reliability on Multiple Propositions</i>  Jonas Raab. <i>Too Many Dutch Book Arguments?</i>
13:00-14:30	Lunch break						
14:30-16:30 Parallel sessions: Contributed papers	H0104 <b>Explanation (2)</b>	H0105 <b>Biomedical Science</b>	H1058 <b>Machine Learning</b>	H2013 <b>General Philosophy of Science (2)</b>	H3005 <b>Mind and Cognition</b>	H3006 <b>Philosophy of Physics (3)</b>	H3010 <b>Science and Values (2)</b>
	Javier Anta. <i>Instrumental and Explanatory Justifications of Coarse-Graining</i>  Philipp Haueis. <i>Patchwork concepts and the norms of explanation</i>  Gregor Hörzer. <i>Constitutive Relevance First: Mechanistic Explanations without Mechanisms?</i>	Mariusz Maziarz. <i>A Perspectival View on Inconsistent Results of Clinical Trials</i>  Julia Mirkin. <i>Trust in Research on Human Germline Genome Editing</i>  Saana Jukola. <i>Bodies of Evidence – Determining the Cause of Death and the Problem of Underdetermination</i>	Koray Karaca. <i>Values and Inductive Risk in Machine Learning</i>  Luis Lopez. <i>Machine Learning Models and Understanding of Phenomena</i>  Oliver Buchholz. <i>The Curve-Fitting Problem Revisited</i>	Radin Dardashti. <i>On the theory-ladenness of theorizing</i>  Anna Elisabeth Höhl. <i>Grasping and Explaining – The GE-Account of Scientific Understanding</i>  Niki Pfeifer. <i>The probabilistic turn in the psychology of reasoning: a necessary paradigm shift?</i>	Karim Baraghith and Christian Johann Feldbacher-Escamilla. <i>From Reduction to Unification: The Case of Cultural Evolutionary Psychology</i>  Maria Sekatskaya. <i>Reductionism in the Philosophy of Science and the Problem of Mental Properties</i>  Matej Kohar. <i>The Scaling-up Problem from a Mechanistic Point of View</i>	Andrea Oldofredi. <i>Relational Quantum Mechanics and the PBR Theorem: A Peaceful Coexistence</i>  Markus Frembs and Frida Trotter. <i>Categorically classical: Lessons from no-go theorems in quantum Foundations</i>  Michael te Vrugt, Gyula I Tóth and Raphael Wittkowski. <i>Irreversibility in statistical mechanics: from quantum</i>	Paul Hoyningen-Huene. <i>Objectivity, the Ideal of Value-Free Science, and Rudner's Objection</i>  Michele Luchetti and Matteo De Benedetto. <i>A dynamic model of theory choice: epistemic values as environmental niches</i>  Eoin Perry. <i>Does Science Need (Pre-Registered) Moral Imagination?</i>

						<i>mechanics to soft matter theory</i>	
16:30-17:00	Break						
17:00-18:30 Plenary	H0104 <b>Brigitte Falkenburg: "Data, Theories and Probability in Physics"</b> – Chair: Vera Hoffmann-Kolss						
18:30-18:45	Closing remarks						