SHORT CURRICULUM VITAE

Dr. Wanja Wiese

April 2024

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EDUCATION

11/2023	Opening of the habilitation procedure, Ruhr University Bochum, Germany.
2015	PhD in Philosophy, Johannes Gutenberg University Mainz, Germany.
2012	Diploma ("M.A.") in Mathematics, Johannes Gutenberg University Mainz, Germany.
2011	Magister Artium ("M.A.") in Philosophy and Mathematics, Johannes Gutenberg University Mainz, Germany.
09/2008-07/2009	ERASMUS exchange student at Utrecht University, The Netherlands.

PROFESSIONAL APPOINTMENTS AND FELLOWSHIPS

Since 04/2021	Post-doctoral researcher and lecturer, Ruhr University Bochum, Institute of Philosophy II, Chair for Philosophy of Mind (Prof. Dr. Albert Newen).
10/2023-03/2024	Interim professor Theoretical Philosophy and Philosophy of the Social Sciences (temporary substitute for Prof. Dr. Jens Harbecke), Faculty of Management, Economics and Society, University Witten/Herdecke.
04/2015-03/2021	Post-doctoral researcher and lecturer, Johannes Gutenberg University Mainz, Department of Philosophy, Theoretical Philosophy Group (Prof. Dr. Thomas Metzinger).
07/2020-11/2020	Parental leave (50%).
12/2018-02/2019	Visiting scholar at the Wellcome Centre for Human Neuroimaging,

	University College London (host: Prof. Dr. Karl Friston).
03/2018-07/2018	Parental leave (100%).
2009-2012	Student assistant, Johannes Gutenberg University Mainz, Department of Philosophy, Theoretical Philosophy Group (Prof. Dr. Thomas Metzinger).
2011-2012	Student assistant, Johannes Gutenberg University Mainz, Department of Philosophy, Philosophy of Science Group (Prof. Dr. Ralf Busse).
2009-2011	Student assistant, Max Planck Institute for Polymer Research, Mainz, Theory Group (Prof. Dr. Kurt Kremer).

PUBLICATIONS

Monographs

Wiese, W. (under contract). *Simulating and Being. Understanding Weak and Strong Artificial Consciousness*. MIT Press.

Wiese, W. (2018). Experienced Wholeness. Integrating Insights from Gestalt Theory, Cognitive Neuroscience, and Predictive Processing. MIT Press.

Review: Downey, A. (2020). Experienced wholeness: Integrating insights from gestalt theory, cognitive neuroscience, and predictive processing. *Philosophical Psychology*. DOI: <u>10.1080/09515089.2020.1719398</u>

Edited Volumes

Rutar, D., Kwisthout, J., & **Wiese, W.** (forthcoming). Special Issue "Developing Models of the World", *Topics in Cognitive Science*. (Planned publication in 2024.)

Fink, S. B., **Wiese, W.** & Windt, J. M. (eds.) (2018). Research Topic "Philosophical and Ethical Aspects of a Science of Consciousness and the Self", *Frontiers in Psychology*. (https://www.frontiersin.org/research-topics/5881/philosophical-and-ethical-aspects-of-ascience-of-consciousness-and-the-self) (**OPEN ACCESS**)

Metzinger, T., & **Wiese, W.** (eds.) (2017). *Philosophy and Predictive Processing*. MIND Group. <u>https://predictive-mind.net</u> (**OPEN ACCESS**)

Refereed Journal Articles

- 1. Rutar, D., **Wiese, W.**, & Kwisthout, J. (2022) From representations in predictive processing to representational gradation. *Minds & Machines 32*, 461-484. DOI: <u>10.1007/s11023-022-09599-6</u> (**OPEN ACCESS**)
- 2. Wiese, W. (2022). Attentional structure and phenomenal unity. *Open Philosophy* 5, 254-264. DOI: <u>10.1515/opphil-2022-0197</u> (OPEN ACCESS)
- 3. Wiese, W., & Friston, K. (2022). Al ethics in computational psychiatry: From the neuroscience of consciousness to the ethics of consciousness. *Behavioural Brain Research 420*, 113704. DOI: <u>10.1016/j.bbr.2021.113704</u> (OPEN ACCESS)
- Wiese, W., & Friston, K. (2021). The neural correlates of consciousness under the free energy principle: From computational correlates to computational explanation. *Philosophy and the Mind Sciences 2*, 9. DOI: <u>10.33735/phimisci.2021.81</u> (OPEN ACCESS)

- Wiese, W. (2021). Von der KI-Ethik zur Bewusstseinsethik: Ethische Aspekte der Computational Psychiatry. [From the ethics of AI to the ethics of consciousness: Ethical aspects of computational psychiatry.] *Psychiatrische Praxis* 48(Suppl. 1), S1– S5. DOI: <u>10.1055/a-1369-2824</u>
- 6. Wiese, W., & Friston, K.J. (2021). Examining the continuity between life and mind: Is there a continuity between autopoietic intentionality and representationality? *Philosophies* 6(1), 18. DOI: <u>10.3390/philosophies6010018</u> (OPEN ACCESS)
- Wiese, W. (2020). The science of consciousness does not need another theory, it needs a minimal unifying model. *Neuroscience of Consciousness, 2020*(1), niaa013. DOI: <u>10.1093/nc/niaa013</u> (OPEN ACCESS)
- Friston, K.J., Wiese, W., & Hobson, J.A. (2020). Sentience and the origins of consciousness: From Cartesian duality to Markovian monism. *Entropy 22(5)*, 516. DOI: <u>10.3390/e22050516</u> (OPEN ACCESS)
- 9. Wiese, W. (2020). Breaking the self: Radical disruptions of self-consciousness and impossible conscious experiences. *Philosophy and the Mind Sciences 1(I)*, 10. DOI: <u>10.33735/phimisci.2020.I.32</u> (OPEN ACCESS)
- 10. **Wiese, W.** (2019). Explaining the enduring intuition of substantiality: The phenomenal self as an abstract salience object. *Journal of Consciousness Studies 26(3-4)*, 64-87.
- **11. Wiese, W.** (2018). Toward a mature science of consciousness. *Frontiers in Psychology* 9, 693. DOI: <u>10.3389/fpsyg.2018.00693</u> (**OPEN ACCESS**)
- 12. **Wiese, W.** (2017). Action is enabled by systematic misrepresentations. *Erkenntnis 82(6), 1233-1252*. DOI: <u>10.1007/s10670-016-9867-x</u>
- 13. Wiese, W. (2017). How to solve the problem of phenomenal unity: finding alternatives to the single state conception. *Phenomenology and the Cognitive Sciences 16(5)*. DOI: <u>10.1007/s11097-016-9478-7</u> (**OPEN ACCESS**)
- 14. **Wiese, W.** (2017). What are the contents of representations in predictive processing? *Phenomenology and the Cognitive Sciences* 16(4), 715-736. DOI: <u>10.1007/s11097-016-9472-0</u>

Book Chapters

- 1. **Wiese, W.** (forthcoming). What distinguishes machine consciousness from a machine simulation of consciousness? In K. Wendland, N. Lahn, & P. Vetter (eds.), *Artificial Intelligence with Consciousness? Statements 2021*.
- Ramstead, M., Wiese, W., Miller, M., & Friston, K. (2024). Deep neurophenomenology: An active inference account of some features of conscious experience and of their disturbance in major depressive disorder. In T. Cheng, R. Sato, & J. Hohwy (eds.), *Expected Experiences: The Predictive Mind in an Uncertain World*. Routledge.
- 3. Wiese, W., & Metzinger, T. (2023). Key concepts of predictive processing. In M. Curado & S. S. Gouveia (eds.), *Predictive processing: New models of the brain and information* (pp. 1-28). Vernon Press.

- 4. **Wiese, W.** & Metzinger, T. K. (2019). Androids dream of virtual sheep. In T. Shanahan & P. Smart (eds.), *Blade Runner 2049*. Routledge, pp. 149-164.
- Wiese, W. (2018). Ethics of beliefs: On some conceptual and empirical obstacles to teaching the ability for positive learning. In O. Zlatkin-Troitschanskaia, G. Wittum, & A. Dengel (eds.), *Positive Learning in the Age of Information (PLATO) - A blessing or a curse*? Springer, pp. 295-314.
- Wiese, W. (2017). Predictive processing and the phenomenology of time consciousness. A hierarchical extension of Rick Grush's trajectory estimation model. In T. Metzinger & W. Wiese (eds.), *Philosophy and Predictive Processing*: 26. MIND Group. DOI: <u>10.15502/9783958573277</u> (OPEN ACCESS)
- Wiese, W. & Metzinger T. (2017). Vanilla PP for philosophers: A primer on predictive processing. In T. Metzinger & W. Wiese (eds.), *Philosophy and Predictive Processing*: 1. MIND Group. DOI: <u>10.15502/9783958573024</u> (OPEN ACCESS)

Spanish translation: Wiese, W., & Metzinger, T. (2021). PP vainilla para filósofos: Un manual sobre Procesamiento Predictivo. *Cuadernos Filosóficos / Segunda Época 17*. DOI: <u>10.35305/cf2.vi17.118</u> (**OPEN ACCESS**)

 Wiese, W. (2015). Perceptual presence in the Kuhnian-Popperian Bayesian brain - A Commentary on Anil K. Seth. In T. Metzinger & J.M. Windt (eds.) *Open MIND*: 35(C). MIND Group. DOI: <u>10.15502/9783958570207</u> (OPEN ACCESS)

Also in: Metzinger, T., & Windt, J.M. (eds.) (2016). *Open MIND, Vol. 2*. MIT Press, pp. 1475-1493.

 Wiese, W., & Metzinger, T. (2012). Desiderata for a mereotopological theory of consciousness: First steps towards a formal model for the unity of consciousness. In S. Edelman, T. Fekete, and N. Zach (eds.), *Being in Time. Dynamical models of phenomenal experience*. John Benjamins Publishing Company, pp. 185-209.

Commentaries in peer-reviewed journals

Wiese, W. (2022). Does the metaphysical dog wag its formal tail? The free energy principle and philosophical debates about life, mind, and matter. *Behavioral and Brain Sciences* 45, e216. DOI: <u>10.1017/S0140525X22000292</u>

Book Reviews

Wiese, W. (2014). Jakob Hohwy: The Predictive Mind. *Minds and Machines 24*(2), 233-237. DOI: <u>10.1007/s11023-014-9338-6</u>

Preprints

Wiese, W. Artificial consciousness: A perspective from the free energy principle. <u>https://philarchive.org/rec/WIECLL</u>

Wiese, W. Minimal models of consciousness: Understanding consciousness in human and non-human systems. <u>https://philpapers.org/rec/WIEMMO-2</u>

AWARDS AND HONORS

- 2019 Joint winner of the *Eighth Annual Essay Prize* at the Centre for Philosophical Psychology, University of Antwerp (1,000 €).
- 2016 Doctoral dissertation award of the Barbara Wengeler foundation (10,000 €).
- 2011 Prize of the faculty for my M.A. thesis in the academic year 2010/2011 (300 €).

EXTERNAL GRANTS AND SCHOLARSHIPS

- 2023-2026 Grant of the DFG for consolidating the open-access journal *Philosophy and the Mind Sciences* (710,367 € in total, 355,530 € of which granted to Ruhr University Bochum).
- 2023 Grant of the Barbara Wengeler foundation for the conference "Models of Consciousness 4" (10,000 €) in September 2023.
- 2023 Grant of the Thyssen foundation for the workshop "Investigating Consciousness in Animals and Artificial Systems: A Comparative Perspective" (7,500 €) in June 2023.
- 2019 Grant of the Lorentz Center in Leiden for a Lorentz workshop (6,875 €) in March 2020.
- 2019 Grant of the Barbara Wengeler foundation for a Lorentz workshop (4,000 €) in March 2020. (Unclaimed because of the SARS-CoV-2-related postponement of the workshop.)
- 04/2012 PhD scholarship, Barbara Wengeler foundation (39,600 €).

03/2015

- Travel award for the conference "KogWis 2014" in Tübingen (250 €), September
 2014.
- 2013 Travel grant of the Barbara Wengeler foundation (1,500 €).
- 2012Travel award for the conference "KogWis 2012" in Bamberg (250€), September
2012.
- 2008–2009 ERASMUS scholarship for the academic year 2008/2009.

INTERNAL GRANTS

2020	Internal university grant for a conference trip to Leiden (460 €), 1620. March 2020. (Unclaimed because of the SARS-CoV-2-related postponement of the workshop.)
2019	Internal university grant for a conference trip to Porto (500 €), 2426. October 2019.
2017	Internal university grant for a conference trip to Edinburgh (500 €), 711. November 2017.
2017	Internal university grant for a conference trip to Braga (500 €), 1013. October 2017.
2016	Internal university grant for a conference trip to Bristol (500 €), 14. September 2026.
2016	Internal university grant for a conference trip to Buenos Aires (1.000 €), 1319. June 2016.
2015	Internal university grant for a conference trip to Utrecht (460 €), 13. September 2015.

INVITED TALKS (since 2016)

2024 "Theoretical progress in consciousness science.", Workshop "Integrating Attention into Consciousness Research", June 6-7, 2024, Munich. "Completeness and Generality in Models of Consciousness.", Bochum Rutgers 2024 Workshop, May 23-24, 2024, New Brunswick, NJ. 2024 "Mathematical theories of consciousness and neuromorphic hardware.", Workshop "Philosophy of Neuromorphic AI", May 2024. (Online) 2024 "Meta-theoretical approaches to consciousness in humans, animals, and Al.", Online Seminar Series "Progress and Visions in Consciousness Science", January 2024. (Online) 2023 "What is at stake in debates on artificial consciousness?" Mainz and Friends Artificial Intelligence Conference (MAInC 2023), June 14, 2023, Mainz. Comment on a talk by Bruno Souza at the Third RUB-UFMG Workshop, May 2, 2023 2023. (Online.) 2023 "Could large language models be conscious? A perspective from the free energy principle." Active Inference Journal Club, March 29, 2023. (Online) 2022 "Wie kann die Erforschung des Gehirns das Verständnis psychischer Krankheiten fördern?" ("How can neuroscientific research deepen our understanding of mental disorders?"), Bernstein Center Freiburg, ALU Freiburg, January 10, 2022. (Online) 2021 "Artificial consciousness: Conceptual and ethical considerations", Oxford Mathematics of Consciousness and Application Network, University of Oxford, October 20., 2021. (Online) 2021 "Computational Psychiatry", Symposium "KI in der Psychiatrie und Psychotherapie" ("AI in Psychiatry and Psychotherapy"), Institute for Ethics, History and Theory of Medicine, LMU Munich, July 2021. (Online) 2021 "The neural correlates of consciousness under the free energy principle: From computational correlates to computational explanation." The Foundations of the Mind Guild, Northwestern University, May 6, 2021. (Online) "Ethics of AI in Psychiatry", Virtual Interdisciplinary College 2021 ("Connected in 2021 Cyberspace"), Gesellschaft für Informatik, March 18, 2021. (Online) 2021 "Neural correlates, computational correlates, and the prospects of computational explanations of consciousness." Mathematical Consciousness Science Online Seminar, Munich Center for Mathematical Philosophy, February 25, 2021. (Online) 2021 "The neural correlates of consciousness under the free energy principle: From computational correlates to computational explanation." Active Inference Journal Club, February 16, 2021. (Online) 2021 "Integration and unification in the science of consciousness", Consciousness Club Tokyo, Araya Inc., Tokyo, January 29, 2021. (Online) 2021 "Ethics of AI in Psychiatry", Research colloquium at the Chair for Philosophy of Cognition, TU Berlin, January 26, 2021. (Online) Prädiktiven Modellen des Geistes zu 2020 "Von Selbstmodellierung und Computational Psychiatry" ("From Predictive Models of the Mind to Self-Modelling and Computational Psychiatry"), Summer School on "Models of the Mental", Reichenau, September 18-19, 2020.

2020	"The neural correlates of consciousness under the free energy principle." Theoretical Neurobiology Group, Wellcome Trust Centre for Neuroimaging, London, July 14, 2020. (Online)
2019	"Is conscious perception a virtual reality generated by our brains?" Workshop at the Department of Cognitive Science at Nicolaus Copernicus University, Toruń, May 29-30, 2019.
2019	"From Herbart's Mechanics of the Mind to Bayesian Mechanics". Theoretical Neurobiology Group, Wellcome Trust Centre for Neuroimaging, London, February 25, 2019.
2019	"Predictive Processing and Virtualist Perception". Workshop "Predictive Processing, Consciousness, and Self", Bochum, January 26, 2019.
2019	"From Herbart's Mathematical Psychology to Active Inference and Computational Psychiatry". Theoretical Neurobiology Group, Wellcome Trust Centre for Neuroimaging, London, January 7, 2019.
2018	"Perception as Augmented Reality." Workshop "Philosophy of Predictive Processing, Self and Representations", Lisbon, December 19, 2018.
2018	"Perception as Augmented Reality." Donders Institute for Brain, Cognition and Behaviour, Nijmegen, October 25, 2018.
2018	"Probabilistic Representations and Consciousness." Theoretical Neurobiology Group, Wellcome Trust Centre for Neuroimaging, London, February 19, 2018.
2018	"Towards a paradigmatic science of consciousness? On the prospects of integrating multidisciplinary consciousness research." Research colloquium <i>Philosophy and Cognitive Science</i> , Bochum, Germany, January 12, 2018.
2017	"Making it personal: What subpersonal PP stories can tell us about conscious- ness." Workshop "Expecting Ourselves: Prediction, Action, and the Embodied Mind", Edinburgh, November 10, 2017.
2017	"Morphological Computation and Consciousness." Working Group "Morpho- logical Computation", Santa Fe, September 14, 2017.
2017	"Herbartian ideas in predictive processing and their relevance to the problem of self-consciousness." Symposium "Philosophy and Predictive Processing" at ECAP9, Munich, August 25, 2017.
2016	"Must artificial consciousness be embodied?" Workshop "On Conscious Artifi- cial Systems", Tübingen, December 1, 2016.

CONFERENCE ACTIVITY

Conferences Organized

2024 Models of Consciousness 5, September 4-8, 2024, Bamberg.
2023 Models of Consciousness 4, September 4-8, 2023, Oxford.
2023 Investigating Consciousness in Animals and Artificial Systems: A Comparative Perspective, June 1-2, 2023, Bochum.

2022	Models of Consciousness 3, September 5-9, 2022, Stanford.
2021	Models of Consciousness 2, September 27-30, 2021. (Online)
2021	Developing Models of the World, May 17-21, 2021, Leiden. (Online)
2020	Minimal Phenomenal Experience, May 13-15, 2020, Frankfurt am Main. (Postponed because of SARS-CoV-2.)
2020	Developing Models of the World, March 16-20, 2020, Leiden. (Postponed because of SARS-CoV-2.)
2018	Selfless Minds: Workshop on Radical Disruptions of Self-Consciousness, October 5-7, 2018, Frankfurt am Main.
2016	MIND 23, May 4-6, 2016, Frankfurt am Main.
2014	MIND _{intensive} , November 1, 2014, Frankfurt am Main.
2013	MIND _{intensive} , December 17, 2013, Mainz.

Papers Presented (since 2016)

2023	"Understanding weak and strong artificial consciousness", International Society for the Philosophy of the Sciences of the Mind 2023 Web Conference, November/December 2023. (Online)
2023	"Understanding weak and strong artificial consciousness", Workshop Detecting unusual consciousness: from brain organoids to AI systems, Bonn, September 2023.
2023	"Understanding weak and strong artificial consciousness: A perspective from the free energy principle", Models of Consciousness 4, Oxford, September 2023.
2023	"Can minimal models help to understand consciousness?" ASSC26, New York, June 2023.
2023	"Understanding weak and strong artificial consciousness", Investigating Consciousness in Animals and Artificial Systems: A Comparative Perspective, Bochum, June 2, 2023.
2022	"Fair and Open Access in Academia." GAP 11 Symposium, Berlin, September 14, 2022.
2022	"Minimal models of consciousness." GAP 11, Berlin, September 13, 2022.
2022	"Minimal models of consciousness." Models of Consciousness 3, Stanford, September 7, 2022.
2021	"AI Ethics and Computational Psychiatry: How Will Successful Applications of Computational Psychiatry Affect Conceptions of Mental Disorders?" ESPP 2021, University of Leipzig, September 1, 2021. (Online)
2021	"Is there a tension between probabilistic models of brain function and conscious perception?" DGPhil XXV, Friedrich Alexander University Erlangen-

	Nürnberg, September 7, 2021. (Online)
2020	"The role of computation in Shea's theory of explanation in cognitive science." Representation in Cognitive Science, Bochum, February 4, 2020.
2019	(with Danaja Rutar) "Taking Representational Gradation Seriously." Mental Representations in a Mechanical World, Bochum, November 28, 2019.
2019	"Making Sense of Ur-Intentionality." Trends in Interdisciplinary Studies. 4th Avant Conference, Porto, October 24, 2019.
2018	"Discovering asymmetries in the structure of experience through radical disruptions of self-consciousness." Selfless Minds, Frankfurt am Main, October 5, 2018.
2018	"Modeling valences of conscious experiences with lexical vectors." GAP 10, Cologne, September 19, 2018.
2018	"Computing the valence of pleasure and pain." Kogwis, Darmstadt, September 3, 2018.
2017	"Explaining substantiality: The phenomenal self as an abstract salience ob- ject." Workshop "Designed Minds", Edinburgh, November 9, 2017.
2017	"Herbartian ideas in predictive processing and their relevance to the problem of self-consciousness." Third International Conference on Philosophy of Mind, Braga, October 12, 2017.
2017	"What's it worth? Towards a formal model of the subjective value of conscious experiences." ECAP9, Munich, August 24, 2017.
2017	"On some conceptual and empirical obstacles to teaching the ability for posi- tive learning." PLATO Summer Conference, Mainz, June 29, 2017.
2017	"PEM and voluntary shifts of attention." Predictive Coding and the Mind, Bo- chum, March 4, 2017.
2016	"What are the contents of representations in predictive processing?" Kog- Wis2016, Bremen, September 28, 2016.
2016	"Experiencing temporal continua: how is it possible?" CEP2016, Bristol, Sep- tember 2, 2016.
2016	"How can experienced temporal continua be accounted for in terms of finite neural states?" ASSC20, Buenos Aires, June 15, 2016.
2016	"Predictive Processing and the Phenomenology of Time Consciousness." MIND23, Frankfurt am Main, May 5, 2016.
2016	"A hierarchical extension of Rick Grush's trajectory estimation model." Rudolf- Carnap-Lectures 2016, Bochum, March 9, 2016.

DEPARTMENTAL TALKS

2016 "Bradleys Regress und die Einheit des Bewusstseins" ("Bradley's regress and the unity of consciousness"), Department of Philosophy, Mainz, November 9, 2016.

PUBLIC OUTREACH

2024	Panel discussion, workshop "Brain Science and Large Language Models", May 13-14, 2024, Frankfurt (Main).
2019	Talk, "From Predictive Engines to Conscious Machines and Uploading?" European Community Weekend of the Berlin Rationalist Community, Berlin, August 30-September 1, 2019.
2018	Talk, "Philosophie der KI-Forschung: Vom Turing-Test zur Superintelligenz." ("Philosophy of AI: From the Turing test to superintelligence."; talk for high school students) <i>Rabanus-Maurus-Gymnasium</i> , Mainz, February 2018.
2017	Talk, "Ergebnisse aus der Forschung zum Zeiterleben." ("Results from research on temporal experience."), Cultural Centre <i>Betakontext</i> , Berlin, November 2017.
2016	Talk, "Niemand war oder hatte jemals ein Ich. Die Selbstmodelltheorie von Thomas Metzinger" ("No one ever was or had a self. Thomas Metzinger's self- model theory."), Symposium "Wer bin ich wirklich?", Stuttgart, November 19, 2016.
2016	Talk, "Wie wirklich bin <i>Ich</i> ?" ("How real am <i>I</i> ?"), Regensburg, May 19, 2016.