

# Mario Günther

## EMPLOYMENT

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- 22- **Assistant Professor**  
*Munich Center for Mathematical Philosophy*  
LMU MUNICH  
**Academic Visitor** 2022  
UNIVERSITY OF EDINBURGH
- 19-21 **Research Fellow**  
“Humanising Machine Intelligence”  
AUSTRALIAN NATIONAL UNIVERSITY  
**Academic Visitor** 2021  
LONDON SCHOOL OF ECONOMICS & POLITICAL  
SCIENCE
- 18-19 **Research Fellow**  
“Reasoning with Conditionals” (DFG Project)  
UNIVERSITY OF REGENSBURG

## EDUCATION

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- 2019 **PhD in Philosophy**  
“Learning, Conditionals, Causation”  
*Munich Center for Mathematical Philosophy & Gradu-  
ate School of Systemic Neurosciences*  
LMU MUNICH  
Hannes Leitgeb, Stephan Hartmann
- 2015 **Master in Logic and Philosophy of Science**  
“Non-Monotonic Logics, Artificial Neural Net-  
works, and Complexity Considerations in the  
Horn Case”  
*Munich Center for Mathematical Philosophy*  
LMU MUNICH
- 2012 **Bachelor in Philosophy and Cognitive Sci-  
ence**  
“The Methodology of Scientific Research Pro-  
grammes as Modification of Popper’s Falsification-  
ism”  
ALBERT LUDWIG UNIVERSITY FREIBURG  
**Erasmus Year** 2011-12  
UNIVERSITÉ PARIS-SORBONNE (PARIS IV)

## JOURNAL ARTICLES

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- 2023 “A Regularity Theory of Causation” (with Holger  
Andreas)  
*Pacific Philosophical Quarterly* (forthcoming)
- “Actual Causation” (with Holger Andreas)  
*dialectica* (forthcoming)

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🗣 English, German, French, Ancient Greek

“Epistemic Sensitivity and Evidence”  
*Inquiry* (forthcoming)

“Counterfactuals for Causal Responsibility in Le-  
gal Contexts” (with Holger Andreas and Matthias  
Armgardt)  
*Artificial Intelligence and Law* 31:115-132.

“Bayesians Still Don’t Learn from Conditionals”  
(with Borut Trpin)  
*Acta Analytica* 38(3):439-451.

2022 “Causal and Evidential Conditionals”  
*Minds and Machines* 32:613-626.

“Ramsey’s Conditionals” (with Caterina Sisti)  
*Synthese* 200(165):1-31.

“A Connexive Conditional”  
*Logos and Episteme* 13(1):55-63.

“Algorithmic and Human Decision Making: For  
a Double Standard of Transparency” (with Atoosa  
Kasirzadeh)  
*AI & Society* 37:375-381.

2021 “Difference-Making Causation” (with Holger An-  
dreas)  
*Journal of Philosophy* 118(12):680-701.

“A Ramsey Test Analysis of Causation for Causal  
Models” (with Holger Andreas)  
*British Journal for the Philosophy of Science* 72(2): 587-  
615.

2020 “Causation in Terms of Production” (with Holger  
Andreas)  
*Philosophical Studies* 177(6): 1565-1591.

2019 “On the Ramsey Test Analysis of ‘Because’” (with  
Holger Andreas)  
*Erkenntnis* 84(6):1229-1262.

2018 “Learning Conditional Information by Jeffrey  
Imaging on Stalnaker Conditionals”  
*Journal of Philosophical Logic* 47 (5):851-876.  
**Winner of a Wolfgang Stegmüller Award**

2017 “Learning Conditional and Causal Information by Jeffrey Imaging on Stalnaker Conditionals”  
*Organon F*, 24(4):456-486.

2022 Wolfgang Stegmüller Award 4,000€  
“Learning Conditional Information by Jeffrey Imaging on Stalnaker Conditionals”  
GERMAN SOCIETY FOR ANALYTIC PHILOSOPHY

## ENCYCLOPEDIA ENTRIES

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2021 “Regularity and Inferential Theories of Causation”  
(with Holger Andreas)  
*The Stanford Encyclopedia of Philosophy*

“A Unifying Theory of Conditionals” (declined)  
*Walter Benjamin Grant*  
DEUTSCHE FORSCHUNGSGEMEINSCHAFT (DFG)

## CONFERENCE PROCEEDINGS

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2019 “Defining Selection Functions” (with Holger Andreas)  
*The Logica Yearbook 2018*, 1-13.

19-22 Postdoctoral Research Fellow  
*Grand Challenge Humanising Machine Intelligence*  
AUSTRALIAN NATIONAL UNIVERSITY

2017 “Disjunctive Antecedents for Causal Models”  
*Proceedings of the 21<sup>st</sup> Amsterdam Colloquium*, 25-34.

18-19 Postdoctoral Research Fellow  
DEUTSCHE FORSCHUNGSGEMEINSCHAFT (DFG)

## OTHER PUBLICATIONS

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2023 “Kann Europas KI Gesetz eine lebenswerte Zukunft bewahren?” (with William D’Alessandro)  
*prae/faktisch* (German)

15-19 Doctoral Fellowship Grant  
GRADUATE SCHOOL OF SYSTEMIC NEUROSCIENCE

2020 “Large-scale facial recognition is incompatible with a free society” (with Seth Lazar and Claire Benn)  
*The Conversation*.

2014 Top 10% of the master students of the Munich Center for Mathematical Philosophy (refund of study fees)

“Was wird die Künstliche Intelligenz für Versicherungsunternehmen bedeuten?” (German)  
*prae/faktisch*.

11-12 Grant for independent studies  
UNIVERSITÉ PARIS-SORBONNE (PARIS IV)

2018 “What’s Hot in Mathematical Philosophy?”  
*The Reasoner*, 12 (11): 90-91.

09/10 Top 5% in the Cognitive Science II exam  
ALBERT LUDWIG UNIVERSITY FREIBURG

2014 “Logical Symbolicism vs. Dynamicist Connectionism: Is there a Difference in Computational Power?”  
*Incipiens*, 2(1):5-28.

2008 Top 10% in the Formal Logic I exam  
ALBERT LUDWIG UNIVERSITY FREIBURG

## AWARDS & GRANTS

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24-25 LMUexcellent Grant 49,630€  
*Junior Research Fund*  
LMU MUNICH

23/24 Researcher in Residence ≈30,000€  
*Center for Advanced Studies*  
LMU MUNICH

2023 Grant for Teaching “Democracy & AI” 16,620€  
*Venice International University*  
LMU MUNICH

## TEACHING EXPERIENCE

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### Instructor at LMU MUNICH

2023 “Knowledge, Belief, and Degrees of Belief”  
“Democracy & AI” (*Venice International University*)  
22/23 “Intro to Decision Theory” (German)  
“Intro to Scientific Working” (German)  
2022 “Intro to Decision Theory” (German)  
“Causation”

### Instructor at AUSTRALIAN NATIONAL UNIVERSITY

2021 “Philosophy, AI, and Society”  
with Pamela Robinson and Sarita Rosenstock  
2020 “Conditionals”  
with Alan Hájek

### Instructor at UNIVERSITY OF BAYREUTH

- 2020 “Fair Machine Learning”  
 2019 “Decisions, Fairness, and Machine Learning”  
 2018 “Decisions and Machines”  
 2017 “Philosophy of AI”

- 10/11 “Cognitive Science II” (German)  
 Gerhard Strube  
 ALBERT LUDWIG UNIVERSITY FREIBURG  
 10/11 “Logic I” (German)  
 Markus Junker  
 ALBERT LUDWIG UNIVERSITY FREIBURG

### Teaching Assistant

- 2020 “Logic & Critical Thinking”  
 Colin Klein, ANU  
 2019 “The Moral and Political Philosophy of AI”  
 Seth Lazar, ANU  
 2018 “Ethics of AI”  
 Fiorella Battaglia & Atoosa Kasirzadeh, LMU  
 2018 “Versions of Realism”  
 Julian Nida-Rümelin, LMU  
 17/18 “Logic I” (German)  
 Hannes Leitgeb, LMU  
 2017 “Epistemology and Ethics”  
 Julian Nida-Rümelin, LMU  
 “Intro to Philosophy of Science” (German)  
 Alexander Reutlinger, LMU  
 2016 “Intro to Philosophy of Science” (German)  
 Alexander Reutlinger, LMU  
 “The Foundation of the Philosophy of Morals  
 with Kant” (German)  
 Fiorella Battaglia, LMU  
 15/16 “Human Liberty vs. Freedom of Will” (German)  
 Fiorella Battaglia, LMU  
 2015 “Responsibility in the Sciences and Technology”  
 Fiorella Battaglia, LMU (German)  
 “Philosophy of Mind”  
 Stephan Sellmaier, LMU  
 14/15 “Life-form and Science” (German)  
 Fiorella Battaglia, LMU  
 “Metaethics: Constructivism and Realism”  
 Fiorella Battaglia, LMU (German)  
 2014 “Metaethical Foundation of Moral Reasoning”  
 Fiorella Battaglia, LMU (German)  
 13/14 “Robotisation of Warfare. Risk, Ethics and  
 Politics” (German)  
 Fiorella Battaglia, LMU

### ORGANISATION OF EVENTS

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- 2023 Seminar “Democracy & AI”  
 VENICE INTERNATIONAL UNIVERSITY, SAN  
 SERVOLO, ITALY  
 Organizer  
 2022 Workshop “Responsibility & AI”  
 UNIVERSITY OF VIENNA  
 Co-organizer  
 2021 Seminar “Humanising Machine Intelligence” (led  
 by Seth Lazar)  
 AUSTRALIAN NATIONAL UNIVERSITY  
 Convener  
 2020 Reading Group on “Conditionals” (with Frank  
 Jackson, Alan Hájek, and Brian Hedden)  
 AUSTRALIAN NATIONAL UNIVERSITY  
 Organizer  
 2019 Workshop “Decision Theory & the Future of  
 Artificial Intelligence”  
 AUSTRALIAN NATIONAL UNIVERSITY  
 Co-organizer  
 2019 Workshop “Knowledge of Knowledge”  
 UNIVERSITY OF REGENSBURG  
 Co-organizer  
 2018 Seminar “The Ethics of Artificial Intelligence”  
 VENICE INTERNATIONAL UNIVERSITY, SAN  
 SERVOLO, ITALY  
 Co-organizer  
 2018 Seminar “Versions of Realism”  
 VENICE INTERNATIONAL UNIVERSITY, SAN  
 SERVOLO, ITALY  
 Co-organizer  
 2017 International Workshop “Democracy as a Form  
 of Life”  
 PARMENIDES FOUNDATION, GERMANY  
 Co-organizer  
 2017 ECAP9 Symposium on “Current Trends in  
 Neurophilosophy”  
 LMU MUNICH, GERMANY  
 Organizer at the 9<sup>th</sup> European Congress of  
 Analytic Philosophy

- 2017 Conference “Causation, Explanation, Conditionals”  
EV. AKADEMIE, TUTZING (LAKE STARNBERG) AND LMU MUNICH, GERMANY  
Main organizer of an international conference supported by the Graduate School of Systemic Neuroscience, the Bernstein Center for Computational Neuroscience, and the Munich Center for Mathematical Philosophy
- 2017 Seminar “Epistemology and Ethics”  
VENICE INTERNATIONAL UNIVERSITY, SAN SERVOLO, ITALY  
Co-organizer
- 2015 Conference “Predictive Brain”  
VENICE INTERNATIONAL UNIVERSITY, SAN SERVOLO, ITALY  
Co-Organizer

## RECENT TALKS

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- 2023 “A Theory of Responsibility for Artificial Agents” (invited)  
*Workshop on Reasoning about Responsible Agency in AI*  
INSTITUTE FOR LOGIC, LANGUAGE, AND COMPUTATION, UNIVERSITY OF AMSTERDAM
- “Legal Proof is Rational Belief of Guilt” (refereed)  
*Central APA 2023*  
DENVER
- 2022 “Probability of Guilt” (refereed)  
*GAP.11*  
HUMBOLDT UNIVERSITY OF BERLIN
- “Legal Proof is Rational Belief of Guilt” (refereed)  
*96th Joint Session of the Aristotelian Society and the Mind Association*  
UNIVERSITY OF ST ANDREWS
- “Actual Causation” (invited)  
*The LSE Choice Group*  
LONDON SCHOOL OF ECONOMICS & POLITICAL SCIENCE

## SERVICE

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- 2022 “ACM Conference on Fairness, Accountability, and Transparency”  
Seoul, South Korea  
Programm committee member
- 2020 “Data, AI and Society Seminar Series”  
AUSTRALIAN NATIONAL UNIVERSITY

Permanent Panelist for the public online seminar series

- 2020 “Ethics of data science conference 2020”  
UNIVERSITY OF SYDNEY  
Program committee member
- 2019 “Conditional Logics and Conditional Reasoning: New Joint Perspectives”  
SCHLOSS DAGSTUHL, LEIBNIZ CENTER FOR INFORMATICS  
Collector for the [Dagstuhl report](#)
- 2017 “Causation, Explanation, Conditionals”  
GRADUATE SCHOOL OF SYSTEMIC NEUROSCIENCE, BERNSTEIN CENTER FOR COMPUTATIONAL NEUROSCIENCE, MUNICH CENTER FOR MATHEMATICAL PHILOSOPHY, LMU MUNICH  
Program chair
- 2016 “2<sup>nd</sup> Munich Graduate Workshop in Mathematical Philosophy: Formal Epistemology”  
MUNICH CENTER FOR MATHEMATICAL PHILOSOPHY, LMU MUNICH  
Program committee member for the Munich Center for Mathematical Philosophy

## JOURNAL REVIEWING

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*Synthese* (14x), *Journal of Philosophical Logic* (5x), *Philosophical Studies* (4x), *Analysis* (3x), *Mind & Language* (3x), *Erkenntnis* (2x), *Philosophy of Science* (2x), *Minds and Machines* (2x), *Theoria* (2x), *Artificial Intelligence* (2x), *British Journal for the Philosophy of Science* (2x), *Australasian Journal of Philosophy*, *Noûs*, *Philosophical Quarterly*, *Kriterion*, *Philosophia*, *Episteme*, *European Journal for Philosophy of Science*, *Review of Symbolic Logic*.

## RESEARCH STAYS

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- 2022 “Academic Visitor”  
UNIVERSITY OF EDINBURGH
- 2021 “Academic Visitor”  
LONDON SCHOOL OF ECONOMICS & POLITICAL SCIENCE
- 2018 “International Rationality Summer Institute 2018”  
LMU MUNICH, IRSEE
- 2017 Research Stay  
UNIVERSITY OF BRITISH COLUMBIA, KELOWNA

- 2016 “International Rationality Summer Institute  
2016”  
JUSTUS LIEBIG UNIVERSITY, AURICH
- 2015 “European Summer School of Logic, Language  
and Computation”  
UNIVERSITY POMPEU FABRA, BARCELONA
- 11-12 “Studies in Philosophy and Cognitive Science”  
UNIVERSITY PARIS-SORBONNE (PARIS IV), PARIS

PROF. DR. STEPHAN HARTMANN  
Chair of Philosophy of Science  
*Head of the Munich Center for Mathematical Philosophy*  
LMU MUNICH  
✉[S.Hartmann@lmu.de](mailto:S.Hartmann@lmu.de)

PROF. DR. ALAN HÁJEK  
Research Professor  
*School of Philosophy*  
AUSTRALIAN NATIONAL UNIVERSITY  
✉[Alan.Hajek@anu.edu.au](mailto:Alan.Hajek@anu.edu.au)

## SUPERVISION

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- 2023 “The Limits of Technocracy”  
MA Thesis of Victor Karl Magnússon  
LMU MUNICH
- “The Distance Minimization Approach to the  
Learning of Conditionals”  
MA Thesis of Zahra Moghimkhan  
LMU MUNICH
- “Climate Justice and Game Theory: An  
Investigation of the Significance of Cooperation  
and CO<sub>2</sub> Reductions in International Climate  
Negotiations”  
BA Thesis of Clara Goetz  
LMU MUNICH
- 2020 “Sleeping Beauty and Belief Updating”  
Independent Study with Honours Student Huon  
Porteous  
AUSTRALIAN NATIONAL UNIVERSITY
- 2019 “An Ethical Governor for Reinforcement  
Learning Agents”  
MA Thesis of Torben Swoboda  
UNIVERSITY OF BAYREUTH

PROF. DR. IGOR DOUVEN  
Research Professor  
*Sciences, Normes, Décision*  
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE  
UNIVERSITÉ PARIS IV – LA SORBONNE  
✉[Igor.Douven@sorbonne-universite.fr](mailto:Igor.Douven@sorbonne-universite.fr)

PROF. DR. KATIE STEELE  
Professor of Philosophy  
*School of Philosophy*  
AUSTRALIAN NATIONAL UNIVERSITY  
✉[Katie.Steele@anu.edu.au](mailto:Katie.Steele@anu.edu.au)

PROF. DR. GREGORY WHEELER  
Professor of Theoretical Philosophy & Computer  
Science  
*Director of the Centre for Human and Machine Intelligence*  
FRANKFURT SCHOOL OF FINANCE AND MANAGEMENT  
✉[G.Wheeler@fs.de](mailto:G.Wheeler@fs.de)

PROF. DR. OLIVIER ROY  
Chair of Philosophy I  
*Department Chair of Philosophy*  
UNIVERSITY OF BAYREUTH  
✉[Olivier.Roy@uni-bayreuth.de](mailto:Olivier.Roy@uni-bayreuth.de)

## REFERENCES

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PROF. DDR. HANNES LEITGEB  
Chair of Logic and Philosophy of Language  
*Head of the Munich Center for Mathematical Philosophy*  
LMU MUNICH  
✉[Hannes.Leitgeb@lmu.de](mailto:Hannes.Leitgeb@lmu.de)

PROF. DR. DR. HC. JULIAN NIDA-RÜMELIN, FORMER  
MINISTER OF STATE  
Former Chair of Philosophy and Political Theory  
LMU MUNICH  
✉[Julian.Nida-Ruemelin@lrz.uni-muenchen.de](mailto:Julian.Nida-Ruemelin@lrz.uni-muenchen.de)