# CURRICULUM VITAE January 2023

# Personal data

First name	Márton
Surname	Gömöri
Date of birth	16 March 1985
Nationality	Hungarian
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## Areas of interest

Philosophy of physics, general philosophy of science, metaphysics, logic

### Employment

Sep 2020-	Assistant Professor, Department of Logic, Institute of Philosophy, Eötvös Loránd University	
Feb 2020–	Research Fellow, Institute of Philosophy, Research Centre for the Hu- manities	
Jul 2016–Feb 2020	Assistant Research Fellow, Institute of Philosophy, Research Centre for the Humanities	
Sep 2015–Jul 2016	Junior Research Fellow, Institute of Philosophy, Research Centre for the Humanities	
Education		
<b>PhD</b> Logic and Philosophy of Science, Eötvös Loránd University Budapest, 2016		
MSc Physic	Sc Physics, Eötvös Loránd University Budapest, 2010	
Publications		

"Redukcionizmus: a korrelációk magyarázatán alapuló érv vázlata" ("Reductionism: draft of an argument based on explaining correlations"), *Magyar Filozófiai Szemle (Hungarian Philosophical Review)*, accepted, (2022)

- M. Gömöri and G. Hofer-Szabó, "On the meaning of EPR's Reality Criterion," *Synthese* 199 (2021), pp. 13441-13469., DOI: 10.1007/s11229-021-03382-3 (preprint: http://philsciarchive.pitt.edu/19478)
- "On the Very Idea of Distant Correlations," *Foundations of Physics* 50 (2020), pp. 530–554, DOI: 10.1007/s10701-020-00332-w (preprint: http://philsci-archive.pitt.edu/16888)
- M. Gömöri and L. E. Szabó, "On the Persistence of the Electromagnetic Field," *Journal for General Philosophy of Science* 50:1 (2019), pp. 43-61, DOI: 10.1007/s10838-018-9430-3 (preprint: http://philsci-archive.pitt.edu/12785)
- "Valószínűség, véletlen és a közösok-elv" ("Probability, randomness and the Common Cause Principe"), *Magyar Filozófiai Szemle (Hungarian Philosophical Review)* 62:2 (2018), pp. 63–82.
- M. Gömöri and T. Placek, "Small probability space formulation of Bell's theorem," In G. Hofer-Szabó and L. Wronski (eds.) *Making it Formally Explicit: Probability, Causality and Indeterminism* (European Studies in Philosophy of Science, 6), Springer, New York 2017, pp. 109–127, DOI: 10.1007/978-3-319-55486-0\_6 (preprint: http://philsciarchive.pitt.edu/12749)
- M. Gömöri , B. Gyenis and G. Hofer-Szabó, "How do macrostates come about?", In G. Hofer-Szabó and L. Wronski (eds.) *Making it Formally Explicit: Probability, Causality and Indeterminism* (European Studies in Philosophy of Science, 6), Springer, New York 2017, pp. 213–229, DOI: 10.1007/978-3-319-55486-0\_12 (preprint: http://philsciarchive.pitt.edu/12762)
- M. Gömöri and L. E. Szabó, "Formal statement of the special principle of relativity," *Synthese* 192:7 (2015), pp. 2053–2076, DOI: 10.1007/s11229-013-0374-1 (preprint: http://philsci-archive.pitt.edu/10207)
- M. Gömöri and L. E. Szabó, "Operational understanding of the covariance of classical electrodynamics," *Physics Essays* 26 (2013), pp. 361–370, DOI: 10.4006/0836-1398-26.3.361 (preprint: http://philsci-archive.pitt.edu/9895)
- "Szuperholizmus" ("Superholism"), In Zs. Zvolenszky et al. (eds.), Nehogy érogyűlölők legyünk. Tanulmánykötet Máté András 60. születésnapjára (Not to be hatred of arguments. A collection of essays for the 60th birthday of András Máté), L'Harmattan, Budapest 2013, pp. 55–69.

### Conference presentations

Sep 2022 "Classicality and Bell's theorem" (with Carl Hoefer), *Physics Meets Philosophy: Foundations of Quantum Theory*, Institute of Philosophy, Research Center for the Humanities, Budapest

- Sep 2022 "Bell's spaceships in free fall," Tarskian Algebraic Logic, Relativity Theory and Methodology of Science – István Németi is 80, online
- Oct 2021 "Classicality and Bell's theorem" (with Carl Hoefer), *Foundations 2021: The 20th UK and European Conference on Foundations of Physics*, École Normale Supérieure, Paris
- Sep 2021 "Bell's Assumptions and the Structure of Quantum Mechanics" (with Carl Hoefer), 8th Biennial Conference of the European Philosophy of Science Association, University of Turin
- Sep 2021 "Covariance, invariance and Galilean relativity: lessons from Einstein 1905 paper," *Physics Meets Philosophy: Conceptual Foundations of Relativity,* Institute of Philosophy, Hungarian Academy of Sciences, Budapest
- Jul 2021 "What exactly does the special principle of relativity state? A discussion of Einstein's 1905 paper", *Logic, Relativity and Beyond*, online
- Sep 2020 "The elimination of probability" (with László E. Szabó), Physics Meets Philosophy: Physical Probability, Institute of Philosophy, Research Centre for the Humanities, Budapest
- Dec 2019 Comment on Miklós Márton: "What is the 'physical'? Attempts to define the term in the contemporary debates over physicalism," *Physicalism and Reduction a Jerusalem-Budapest Twin Workshop*, Institute of Philosophy, Research Centre for the Humanities, Budapest
- Sep 2019 "On the reality of the classical electromagnetic field," *Physics Meets Philosophy: On What There Is,* Institute of Philosophy, Hungarian Academy of Sciences, Budapest
- Sep 2019 "A Causal Account of Initial Distributions," 7th Biennial Conference of the European Philosophy of Science Association, University of Geneva
- Aug 2019 "Why do outcomes in a long series of rolling a fair dice approximately follow the uniform distribution?," 16th International Congress on Logic, Methodology and Philosophy of Science and Technology, Czech Technical University, Prague
- Jul 2018 "Why do initial conditions in an actual sequence of experiments approximately follow the uniform distribution over phase space with respect to the Lebesgue measure?," *Foundations 2018: The 19th UK and European Conference on Foundations of Physics*, Utrecht University
- Jun 2018 "On the Role of Statistical versus Single-Case Dependencies in Einstein's Incompleteness Arguments," *Conference on Modality in Physics*, Jagiellonian University, Kraków
- Oct 2017 "The Unreality of Probability" (with László E. Szabó), *Quantum Investigations: Conference in Honour of Miklós Rédei*, London School of Economics and Political Science

- Sep 2017 "Fundamental questions in classical statistical mechanics," *Physics Meets Philosophy: Foundations of Thermodynamics and Statistical Mechanics*, Institute of Philosophy, Hungarian Academy of Sciences, Budapest
- Aug 2017 "Derivation of the transformation laws for the electrodynamic quantities from electrodynamics without presuming covariance" (with László E. Szabó), *Logic, Relativity and Beyond*, Rényi Institute, Budapest
- Aug 2017 "Derivation of the transformation laws for the electrodynamic quantities from electrodynamics without presuming covariance", 6th Summer School on the History and Philosophy of Science: Understanding Relativity Theory, University of Tubingen
- Jul 2017 "Probability without probability", *THINK*<sup>3</sup> *Conference on Science and Society*, Tata, Hungary
- Jul 2016 "For the 40th Birthday of Bell's Spaceships" (with László E. Szabó), *The 18th UK* and European Conference on Foundations of Physics, London School of Economics and Political Science
- Jul 2016 "On the Meaning of EPR's Criterion of Reality", British Society for the Philosophy of Science Annual Conference, Cardiff University
- May 2016 "Chance in a Physical World", *Fifth Workshop of the Budapest-Krakow Research Group on Probability, Causality and Determinism,* Institute of Philosophy, Hungarian Academy of Sciences, Budapest
- Sep 2015 "A short remark on generalizing probability spaces in quantum mechanics", Fourth Workshop of the Budapest-Krakow Research Group on Probability, Causality and Determinism, Jagiellonian University, Krakow
- Aug 2015 "Facts and conventions on Poincaré's disc", Logic, Relativity and Beyond: 2nd International Conference, Rényi Institute, Budapest
- Jul 2015 "Operationalist Approach to Quantum Theory: Two Representation Theorems" (with László E. Szabó and Zalán Gyenis), British Society for the Philosophy of Science Annual Conference, Manchester
- May 2015 "On Einstein's Reality Criterion" (with Gábor Hofer-Szabó), *Third Workshop of the Budapest-Krakow Research Group on Probability, Causality and Determinism,* Institute of Philosophy, Hungarian Academy of Sciences, Budapest
- Dec 2014 "Only conjunction", Second Workshop of the Budapest-Krakow Research Group on Probability, Causality and Determinism, Jagiellonian University, Krakow
- Nov 2014 "How to Move an Electromagnetic Field?", PSA Biennial Meeting, Chicago

Sep 2014 "A New Problem of Conjunctions", *First Workshop of the Budapest-Krakow Research Group on Probability, Causality and Determinism,* Institute of Philosophy, Hungarian Academy of Sciences, Budapest

Jan 2013	"The principle of relativity—a case study in understanding a fundamental prin ciple of physics" (in Hungarian), <i>Explanation and Understanding</i> , Kaposvár, Hun gary	
Nov 2012	"The epistemology of the special principle of relativity", Midterm Conference of the Italian Society of Logic and Philosophy of Science, Milan, Italy	
Sep 2012	"'What exactly does the special relativity principle assert?", <i>First International Conference on Logic and Relativity: honoring István Németi's 70th birthday</i> , Rényi Institute, Budapest	
Sep 2009	"Operationalist Reconstruction of the Semantics of Classical Electrodynamics", <i>Mathematics, Physics and Philosophy in the Interpretation of Relativity Theory,</i> Eötvös University, Budapest	
Talks		
Apr 2022	"Entropic taming of the Look Elsewhere Effect" (with Miklós Rédei), Logic and Philosophy of Science Seminar, Eötvös University, Budapest	
Jan 2021	Comment on Carl Hoefer: "Scientific realism and direct reference to unobserv- able natural kinds," Institute of Philosophy, Research Centre for the Humanities, Budapest	
Oct 2020	"On the Meaning of EPR's Reality Criterion" (with Gábor Hofer-Szabó), <i>Theoret-ical Philosophy Forum</i> , Eötvös University, Budapest	
Feb 2020	"Outline of a Causal Theory of Chance," LOGOS Seminar, University of Barcelona	
May 2019	"Probability, causality and the approach to equilibrium," <i>Theoretical Philosophy Forum</i> , Eötvös University, Budapest	
Nov 2018	"On the Very Idea of Distant Correlations," Budapest Science Studies Laboratory, CEU, Budapest	
Oct 2018	"Outline of a Causal Theory of Chance," <i>Colloquium of the Düsseldorf Center for Logic and Philosophy of Science</i> , University of Düsseldorf	
May 2018	"Probability, randomness and the Common Cause Principle," Philosophy of Physics Reading Group, Leibniz University Hannover	
Dec 2017	"The Elimination of Probability" (with László E. Szabó), <i>Theoretical Philosophy Forum</i> , Eötvös University, Budapest	
Jul 2017	"Probability, randomness and the Common Cause Principle", Seminar Series of the Institute of Philosophy, Hungarian Academy of Sciences, Budapest	
Apr 2017	"Monty Hall on the Humean Mosaic", Theoretical Philosophy Forum, Eötvös University, Budapest	

- Mar 2017 "On the Persistence of the Electromagnetic Field", Lunchtime Colloquium of the Center for Philosophy of Science, University of Pittsburgh
- Mar 2017 "On the relation of the relativity principle and covariance", *Meeting of the Southern California Philosophy of Physics Group*, University of California, Irvine
- May 2016 "The Strong Humean Censorship Thesis", Philosophy of Science Reading Group, University of Salzburg
- Mar 2016 "Reichenbach's Common Cause Principle from a Humean perspective", *Theoretical Philosophy Forum*, Eötvös University, Budapest
- Apr 2015 "Only conjunction", Theoretical Philosophy Forum, Eötvös University, Budapest
- Jun 2014 "How to move an electromagnetic field?", *Research Seminar in the Philosophy of Natural Sciences*, London School of Economics and Political Science, London
- Jun 2013 "What every picture must have in common", *Logic and Philosophy of Mathematics* Seminar, Eötvös University, Budapest
- Dec 2012 "Only one kind of convention", *Theoretical Philosophy Forum*, Eötvös University, Budapest
- Nov 2012 "Justification of deduction", Logic Tea Budapest, Eötvös University, Budapest
- May 2012 "Ontological incompleteness of classical electrodynamics", *Theoretical Philosophy Forum*, Eötvös University, Budapest
- Mar 2011 "On the problem of empirical meanings of the spatio-temporal quantities in general relativity" (in Hungarian), *Theoretical Philosophy Forum*, Eötvös University, Budapest
- Nov 2010 "Is there a classical description of the coupled system of 'charged particles + electromagnetic field'?" (in Hungarian), *Theoretical Philosophy Forum*, Eötvös University, Budapest
- Mar 2010 "What exactly does the relativity principle state?" (in Hungarian), *Theoretical Philosophy Forum*, Eötvös University, Budapest
- Dec 2008 "Covariance of electrodynamics—a logico-empiricist reconstruction" (in Hungarian), *Theoretical Philosophy Forum*, Eötvös University, Budapest

#### **Research stays**

Nov 2019 – Jul 2020 Faculty of Philosophy, University of Barcelona (Eötvös Fellowship)

- May 2018 Institute of Philosophy, Leibniz University Hannover (EPSA Fellowship)
- Oct 2015 Jun 2016 Department of Philosophy, University of Salzburg (Ernst Mach Grant)

Jan 2014 – Jul 2014 Centre for Philosophy of Natural and Social Science, London School of Economics and Political Science (Campus Hungary)

### **Research projects**

- 2015–2025 A Formal Approach to the Metaphysical Foundations of Physics, OTKA/NKFIH K115593 and K134275 (http://phil.elte.hu/bpgroup)
- 2014–2016 The Budapest-Krakow Research Group on Probability, Causality and Determinism (http://bp-k.tumblr.com/)

### **Conference** organization

May 2014 London Foundations Connection, One-day Conference on the Foundations of Quantum Theory, London School of Economics and Political Science, London

### Teaching experience

- Introductory logic in the Logic and Philosophy of Science MA, Semiotics MA and Computational and Cognitive Neuroscience MSc programs in English, and in the Liberal Arts BA program in Hungarian (Eötvös Loránd University).
- Introductory and advanced philosophy of science and philosophy of physics in the Logic and Philosophy of Science MA program in English (Eötvös Loránd University).

## Languages

English fluent

German basic