

Funded Research Projects (last 8 years):

- *PERSP: Philosophy of Perspectival Thought and Facts*. Spanish MICINN ministry funded large research project (“Consolider-Ingenio”), 2010 - 2015. Participant & Adjunct coordinator. €2,000,000.
- *Space and Time: from the Manifest to the Scientific Image*. Spanish ministry funded project with the aim of studying possible ways of reconciling space and time as we experience them with the account(s) of them extractable from our best physical theories; head of research group. 2012-2014. €59,290.
- *Grup de Recerca/Investigació en Epistemologia i Ciències Cognitives*, Consolidated Research group of the Catalan government; head of research group. 2010-2014. €26,000
- *Laws, Explanation and Realism in Physical and Biological Sciences*. Spanish MICINN funded research project FFI2016-76799-P. Co-Principal Investigator with Jose Díez Calzada. 2017 – 2020. €46,000.
- *Perspectival Thought and Facts: New Questions*. (Project member). Spanish Ministry of Economy, MINECO FFI2016-81858-REDC. 41,500€. Coordinator: Manuel García-Carpintero. 2016.
- *LOGOS Research Group in Analytic Philosophy*. Consolidated research group of the Catalan government 2017-SGR-0063; senior member. 60.000€. Coordinator: Sven Rosenkranz. 2018-2021.
- *Reassessing Scientific Objectivity*. Spanish MICIN funded research project PID2020-115114GB-I00. Co-IP with Jose Díez Calzada. Sept. 2021-Aug. 2025. €70,180. Also awarded FPI predoctoral fellowship.
- *María de Maeztu Unit of Excellence* awarded to [BIAP](#) (Barcelona Institute of Analytic Philosophy). C. Hoefer, Director and IP of grant application. 2023-2026, €2,000,000.

Publications:

Articles

- “Substantivalism and the Hole Argument”, co-authored with Nancy Cartwright, *Philosophical Problems of the Internal and External Worlds (Festschrift for Adolf Grünbaum)*, John Earman, Al Janis, Gerald Massey and Nicholas Rescher (eds), Pittsburgh: University of Pittsburgh Press, 1994.
- “Einstein’s Struggle for a Machian Gravitation Theory”, *Studies in History and Philosophy of Science* vol 25 no 3, 1994.
- “Empirical Equivalence, Underdetermination and Systems of the World” co-authored with Alex Rosenberg, *Philosophy of Science* vol 61 no 4, 1994.
- “Einstein’s Formulations of Mach’s Principle” in *Einstein Studies vol 6: Mach’s Principle: From Newton’s Bucket to Quantum Gravity* (volume dedicated to the international conference ‘Mach’s Principle: From Newton’s Bucket to Quantum Gravity’, 26 July - 1 August 1993, Tübingen, Germany), Julian Barbour and Herbert Pfister (eds), 1995.

- “The Metaphysics of Spacetime Substantivalism”, *The Journal of Philosophy* vol 113 no 1, 1996.
- “On Lewis’ Objective Chance: Humean Supervenience Debugged”, *Mind* vol 106 no 422, 1997.
- “Absolute vs Relational Spacetime; For Better or Worse, the Debate Goes On”, *British Journal for the Philosophy of Science* vol 49, 1998.
- “Energy Conservation in GTR”, *Studies in History and Philosophy of Modern Physics* vol 31 no 2, 2000.
- “Kant’s Hands and Earman’s Pions: Chirality Arguments for Substantival Space”, *International Studies in Philosophy of Science* vol 14 no 3, 2000.
- “Philosophy of Space-time Physics” co-authored with Craig Callender, *The Blackwell Guide to the Philosophy of Science*, ed. P. Machamer and M. Silberstein (Blackwell Publishers, 2002).
- “Freedom from the Inside Out”, in Craig Callender (ed.), *Time, Reality and Experience* (Cambridge University Press, 2002).
- “For Fundamentalism”, *Philosophy of Science* v. 70, no. 5 (PSA 2002 Proceedings), pp. 1401 – 1412, 2003.
- “Humean Effective Strategies”, in *Logic, Methodology and Philosophy of Science: Proceedings of the 12th International Congress* (ed. Petr Hajek, Luis Valdes-Villanueva and Dag Westerstaahl). London: KCL Press, 2005
- “Causality and Determinism: Tension, or Outright Conflict?” *Revista de Filosofia* (Madrid) v. 29 no. 2 (2004), pp. 99 – 115. Manuscript available at philsci-archieve.pitt.edu
- “Probability in GRW Theory”, co-authored with Roman Frigg; *Studies in History and Philosophy of Modern Physics* v. 38, 2007, pp. 371-389.
- “The Third Way on Objective Probability: A Skeptic’s Guide to Objective Chance”, *MIND* 116 (2007): 549-596.
- “Causation in Space-time Theories”, in *Oxford Handbook of Causation* (ed. Christopher Hitchcock, Helen Beebe & Peter Menzies). Oxford: OUP, 2009.
- “Probability: 5 questions”, article commissioned for *Probability and Statistics: 5 Questions*, ed. Vincent Hendricks and Alan Hájek, Automatic Press/VIP, 2009.
- “Determinism and Chance from a Humean Perspective”, co-authored with Roman Frigg, in Dieks, González & Hartmann (eds.), *The Present Situation in the Philosophy of Science (The Philosophy of Science in a European Perspective v. 1)*, Springer, 2010. Pp. 351-372.
- “Time and Chance Propensities”, article commissioned for *The Oxford Handbook of Time* (ed. Craig Callender), Oxford University Press, 2011.
- “Physics and the Humean Approach to Probability”, article commissioned for *Probabilities in Physics* (ed. Stephan Hartmann & Claus Beisbart), Oxford University Press, 2011.

- “Calibration: Being In Tune with Frequencies”, Special issue of *Dialectica*, edited by Philip Ebert & Martin Smith. v. 66, no. 3 (2012), pp. 435 – 452.
- “The Best Humean System for Statistical Mechanics”, co-authored with Roman Frigg. *Erkenntnis*. Special issue edited by J. Berkovitz & P. Huneman. Online Oct. 16, 2013. DOI: 10.1007/s10670-013-9541-5.
- “Mach's Principle as action-at-a-distance in GR: the causality question”, *Studies in History and Philosophy of Modern Physics*. Online First Oct. 2014.
- “Consistency and Admissibility: Reply to Meacham”, in *Chance and Temporal Asymmetry* (ed. Alastair Wilson), Oxford University Press, 2014.
- “Aleatoriedad y mecánica cuántica. Crónica de un diálogo entre físicos, matemáticos, informáticos y filósofos”, co-authored with A. Solé. *Investigación y Ciencia*. September 2015.
- “Introduction: Space–time and the wave function”, co-authored with Albert Solé, intro to special issue of *Synthese* (eds. A. Solé & C. Hofer), *Synthese* 192:10 (2015), pp. 3055-3070. DOI: 10.1007/s11229-015-0826-x.
- “Philosophy of Physical Sciences”, co-authored with Chris Smeenk, in Paul Humphreys (ed.), *The Oxford Handbook of Philosophy of Science*. Oxford University Press, 2016.
- “Objective Chance: Not Propensity, Maybe Determinism”, *Lato Sensu: Revue de la Société de Philosophie des Ciencias*, U. Catholique Louvain, 2016. <https://ojs.uclouvain.be/index.php/latosensu/article/view/3163>
- “Water Has a Microstructural Essence After All”, co-authored with Genoveva Martí, *European Journal for Philosophy of Science*, 9:12 (2019). <https://doi.org/10.1007/s13194-018-0236-2>
- “The Nomological Interpretation of the Wave Function”, with Albert Solé, in *Philosophers Look at Quantum Mechanics*, ed. Alberto Cordero, *Synthese Library #409*, Springer 2019.
- “The Philosopher’s Paradox: How to Make a Coherent Decision in the Newcomb Problem”, co-authored with Christopher Viger & Dan Viger, *THEORIA. An International Journal for Theory, History and Foundations of Science*. Volume 34/3, September 2019, pp. 313-471.
- “Scientific Realism Without the Quantum”, in *Scientific Realism and the Quantum*, ed. Steven French & Juha Saatsi, Oxford University Press 2020
- “The Metaphysics of Machian Frame-Dragging”, co-authored with Antonio Vassallo, in *Einstein Studies v. 15, Thinking About Space and Time* (edited by Claus Beisbart, Tilman Sauer & Chris Wüthrich), Springer, 2020.
- “Realism, Reference & Perspective”, co-authored with Genoveva Martí, in *European Journal for Philosophy of Science* 10:3, 2020.
- “Measures of effectiveness in medical research: Reporting both absolute and relative measures”, co-authored with Alexander Krauss, in *Studies in History and Philosophy of Science* 88:280–283 (2021). <https://doi.org/10.1016/j.shpsa.2021.06.012>

- “Nothing to Come in a Relativistic Setting”, co-authored with Mauro Dorato, in *Disputatio* (Sciendo) v. 13, issue 63, pp. 433-44, 2021.

Encyclopedia articles

- “Causal Determinism”, encyclopædia article for the Stanford Encyclopedia of Philosophy (online, Jan. 2003, revised & updated January 2016: see plato.stanford.edu)
- “The Hole Argument”, in Donald Borchert (ed.), *Macmillan’s Encyclopedia of Philosophy*, 2nd edition. Detroit:Macmillan Reference, 2006.
- “Conventionalism”, in Donald Borchert (ed.), *Macmillan’s Encyclopedia of Philosophy*, 2nd edition. Detroit:Macmillan Reference, 2006.
- “Chance” co-authored with Alan Hájek, in Donald Borchert (ed.), *Macmillan’s Encyclopedia of Philosophy*, 2nd edition. Detroit:Macmillan Reference, 2006.
- “Absolute and Relational Theories of Space, Time and Motion”, co-authored with Nick Huggett, Stanford Encyclopedia of Philosophy (online, July 2006; revised/expanded July 2021).

Books

- *Causality and Explanation: Essays in Honor of W. Salmon*, Special issue of journal *Ernanthos*. UAB Press, Barcelona 2006. Co-edited with Jose Diez.
- *Nancy Cartwright’s Philosophy of Science* edited by Hartmann, S., Bovens, L. and Hofer, C. “Introduction to the Philosophy of Nancy Cartwright” by C. Hofer. Routledge publishers, 2008; paperback edition, 2011.
- *Chance In the World: A Humean Guide to Objective Chance*. Oxford University Press, 2019.

Reviews

- “Review of John Earman’s *World Enough and Space-Time*”, *Canadian Philosophical Reviews* vol 11, pp 178-181.
- “Review of John Earman’s *World Enough and Space-Time*”, co-authored with Christopher Ray, *British Journal for the Philosophy of Science* vol 43, pp 573-580, 1992.
- “Review of Bas C van Fraassen’s *Quantum Mechanics*”, *Mind* vol 102, pp 539-542, 1993.
- “Review of Einstein Studies vol 3: Studies in the History of General Relativity” *Annals of Science*, 1995.
- “Review of *Understanding Space-time* by Robert DiSalle”, *Notre Dame Philosophical Reviews*, 2008.
- “Review of *How Physics Makes Us Free* by Jenann Ismael”, *Notre Dame Philosophical Reviews*, 2016.
- “Review of *Beyond Chance and Credence* by Wayne Myrvold”, *The Philosophical Review*, forthcoming 2023.

Submitted:

- Anta, J. & Hofer, C., "Rethinking the Intellectual Genesis of Landauer's Principle", in proposed collection *A History of Physics: Phenomena, Ideas & Mechanisms*, Springer series *History of Mechanism and Machine Science*.
- Gömöri, M. & Hofer, C., "Classicality and Bell's Theorem", submitted to *European Journal for Philosophy of Science*.

Public Presentations (recent years):

- Feb 2017 "Las Ideas Revolucionarias de Elizabeth Anscombe sobre la Causalidad", Seminari del Grup de Filosofia Analítica de la Societat Catalana de Filosofia, *Institut d'Estudis Catalans*, Barcelona.
- Apr 2017 "Time, Physics and Determinism in Ismael's *How Physics Makes Us Free*", invited symposium presentation, APA Pacific Division Meetings, Seattle.
- Apr 2017 "Physics and Temporal Becoming", invited talk at workshop "The Phenomenology and the Physics of Time", University of Rome 3, Rome, Italy.
- Sep 2017 "Natural kind terms: challenging the new-wave anti-essentialism and descriptivism", co-presenter Genoveva Martí, *EPSA '17*, University of Exeter, UK.
- Sep 2017 "Quantum natural kinds: like atoms, or phlogiston?", invited keynote talk at conference *Realism & the Quantum*, University of Leeds, UK.
- Nov 2017 "Quantum natural kinds: like atoms, or phlogiston?", invited colloquium at University of Milan's Centre for the Philosophy of Time, Milan, Italy.
- Nov 2017 "El filòsof davant la ciència: Del cel estrellat a l'univers infinit", *Barcelona Pensa* outreach event.
- Nov 2017 "What should we believe about black holes?", invited colloquium at Harvard University's Black Hole Initiative (BHI), Cambridge MA.
- Mar 2018 "Comments on *What Makes Time Special?*", invited talk at author-meets-critics session, Pacific APA meetings, San Diego.
- May 2018 "Foundational questions in black hole physics: A difficult meeting-ground for philosophers and physicists?" Invited talk, 2nd Annual Conference, Harvard Black Hole Initiative (BHI). Cambridge, MA.
- Sep 2018 "Selective Scientific Realism and Reference to Theoretical Unobservables", Invited talk at 2-day Workshop in Honor of Michael Devitt, University of Barcelona, Barcelona, Spain.
- Sep 2018 "Water has a microstructure [after all]", invited talk at Dubrovnik Philosophy Of Language Conference 2018, Inter-University Center, Dubrovnik, Croatia
- Sep 2018 "Comments on J. Norton, "Unification and Quantum Gravity".", commentary presentation at 3rd annual POND Conference, Lisbon, Portugal.
- Oct 2018 "QM, Non-locality & Realism", invited talk at *Physis: XIII Annual Ontology*

Conference, San Sebastian, Spain.

- Oct 2018 “Manifest Time as Physicalism’s 2nd “Hard Problem”, talk at LSE Lakatos Award symposium on Craig Callender’s *What Makes Time Special*. CPNSS, London School of Economics, London, England.
- Apr 2019 “Is physics incompatible with the passage of time?”, Invited talk at conference *What is Time? Einstein-Bergson 100 Years Later*, University of L’Aquila, Italy.
- May 2019 “Is physics incompatible with the passage of time?”, Invited talk at 4th Belgrade Graduate Conference, University of Belgrade, Serbia.
- May 2019 “How to think about temporal perception & experience”, invited talk at Workshop *Experiencing Reality Directly*, Bar Ilan University, Jerusalem
- May 2019 “Humean chance and ontological levels”, invited talk in workshop *The Multi-level Structure of Reality*, Hebrew University, Jerusalem.
- Oct 2019 “How *a priori* should chances be in statistical mechanics?”, invited talk at Rutgers University workshop on the Foundations of Probability, New Brunswick, NJ.
- Nov 2019 “Is QM incompatible with the passage of time?”, invited talk at Lausanne University workshop on Structure, Time & Laws. Lausanne, Switzerland.
- Dec 2019 “How to think about temporal passage, the open future and free will”, invited talk at Ca’ Foscari University workshop on The Problem of Indeterminacy, Chance, Future, Contingency, Venice, Italy.
- Dec 2020 “Quantum Non-locality & Realism (Scientific and Metaphysical)”, Keynote address, Workshop *Philosophical Issues of Quantum Mechanics*, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brasil (online).
- Jan 2021 “Scientific realism and direct reference to unobservable natural kinds”, Invited talk, Institute of Philosophy, Research Center for Humanities, Budapest, Hungary (online).
- Apr 2021 “Realism, Reference & Perspective”, with Genoveva Martí, invited talk at conference *Metaphysics from a Human Point of View*, U. Edinburgh (online).
- Sep 2021 “Bell’s Assumptions and the Structure of Quantum Mechanics”, with Márton Gömöri, *EPSA21*, contributed paper, University of Torino, Italy.
- Oct 2021 “Reference and Unobservable Entities”, Fifth Parma Workshop on Semantics and Pragmatics, University of Parma, Italy.
- Nov 2021 “Physicalism & Fundamental Physics: A Challenge for Hemmo and Shenker”, *PRIN Workshop: The manifest image and the scientific image: objects, properties and relations*, University of Florence, Italy.
- Dec 2021 “Humean Chance & Causation”, invited talk, *Workshop on Causal Explanation*, University of Trento, Italy.

- May 2022 “Much ado about nothing: The dubious roles of points in the metaphysics of spacetime”, invited talk, [Warsaw Spacetime Colloquium](#) (online).
- June 2022 “Objective chances with a touch of the epistemic”, keynote talk, *V Congreso de Postgrado de la SLMFCE (Sociedad de Lógica, Metodología y Filosofía de Ciencia en España)*, Valladolid, Spain.
- June 2022 “Chemical kind terms”, Experimental Semantics Gathering, Hudson, NY, USA.

Service and Responsibilities:

Doctoral Theses Supervised

- 2001 Cynthia Ma, LSE, “*Process Causation and Quantum Physics*”
- 2002 Antigone Nounou, LSE, “*Gauge Theories: A Case Study of How Theories Relate to the World*”
- 2002 Michela Massimi, LSE, “*Pauli's Exclusion Principle: a philosophical perspective*”
- 2003 Roman Frigg, LSE, “*Re-presenting Scientific Representation*”
- 2005 Davide Vecchi, LSE, “*Epistemological Prospects of Evolutionary Models of the Growth of Knowledge*”
- 2006 Emiliano Boccardi, LSE, “*The Naturalization of Computation*”
- 2006 Favio Calá Vitery, UAB, “*De la Relatividad de la Inercia a la Geometrodinámica Intrínseca: Una Interpretación Relacional del Espacio-Tiempo*”
- 2008 Adán Sus Durán, UAB, “*General Relativity and the Physical Content of General Covariance*”
- 2012 Eduardo Ruiz Sosa, UAB, “La Observación en la Palabra. La Función de los Experimentos Imaginarios en el Desarrollo de la Física Cuántica. 1927-1936.”
- 2014 Aldo Filomeno, UAB, “On the Possibility of Stable Regularities Without Fundamental Laws.”
- 2016 Christopher Evans, UAB, "The generation of knowledge through experimentation in fundamental physics: The case of gravity probe B”
- 2021 Javier Anta, U. Barcelona, “Historical and Conceptual Foundations of Information Physics”.
- 2022 Álvaro Mozota, U. Autònoma de Barcelona, “Quantum gravity or the problematic quantization of general relativity”.

Service roles:

Department

1992 - 1998	University of California at Riverside	Undergraduate Advisor
1998 - 2002	London School of Economics	Director of Graduate Studies
2017 - 2021	U. Barcelona, Facultat de Filosofia	Member, <i>Junta de Facultat</i>

University

1996 - 1998	University of California at Riverside	Faculty representative, Chancellor's Registration Fees Advisory Committee
1998 - 2002	London School of Economics	Departmental representative, Graduate School Committee

CPNSS

1998 - 2002	LSE Centre for Philosophy of Natural and Social Science (CPNSS)	Steering Committee
Mar – Sept 2001	Centre for Philosophy of Natural and Social Science (CPNSS)	Co-director
2001 (Sept) - 2002 (Sept)	Centre for Philosophy of Natural and Social Science (CPNSS)	Director

Rotman Institute of Philosophy

2013 – 2015 Director

Barcelona Institute of Analytic Philosophy (BIAP)

2018 – present Director

Professional

Member, Board of Governors, [John Bell Institute](#) (2019 – present)

Editor in Chief, *European Journal for Philosophy of Science*, 2009 – 2017

Section editor for Philosophy of Science, *Blackwell's Philosophy Compass* (2007-2010)

Conferences Organized (recent years):

- *Causation & Explanation in Physics, Biology and Economics*, Feb. 2010, co-organized with Jose Diez (UB)
- *PERSP/GRECC Workshop on Mathematical and Geometrical Explanations in Physics*, March 2012, co-organized with Laura Fellingine (UAB)
- *PERSP Workshop on Space-time and the Wave Function*, April 19-20 2013, Barcelona, co-organized with Albert Solé (UAB/PERSP).

- *Gravity and Geometry: Centenary Perspectives on General Relativity*, May 2015. UWO Annual Phil. Physics Conference. Co-organized with Robert Disalle (UWO).
- *Epistemic Rationality*, September 2017, Barcelona. Co-organized with Thomas Sturm & Sven Rosenkranz.
- *Annual Workshop, Laws, Explanation & Realism Project*, January 2018, co-organized with Jose Díez (UB).
- *POND IV*, annual conference of network Philosophy of Science Around the Mediterranean, co-organized with Jose Díez, September 2019 (UB)

External Examiner for PhD thesis:

- Oliver Pooley, Oxford University, UK: 2002
- Dean Rickles, Leeds University, UK: 2004
- Rogerio Severo, U. of Chicago, USA: 2006
- Kyoung-Eun Yang, LSE, UK: 2007
- Iñaki San Pedro, U. Complutense de Madrid: 2008
- Aidan Lyon, Australian National University: 2009
- Albert Solé, Universidad Complutense de Madrid: 2009
- Luis Carlos Medina Ruiz, Universidad del País Vasco: 2009
- Dennis Lehmkuhl, Oxford University: 2009
- George Masterton, Uppsala University (Sweden): 2010
- Daniele Molinini, Université Paris 7 Denis Diderot: 2011
- Fernanda Samaniego, Universidad Complutense de Madrid: 2011
- Mario Bacelar Valente, Universidad de Granada: 2011
- Oscar Castro García, Universitat Autònoma de Barcelona: 2016
- Cristian López, Lausanne University: 2019
- Roger Deulofeu, Universitat de Barcelona, 2020
- Javier Suárez Díaz, Universitat de Barcelona, 2020
- Alfonso García, Universitat de Barcelona, 2021
- Lisa Vogt, Universitat de Barcelona, 2022
- Federico Viglione, Universitat Autònoma de Barcelona, 2022.

Journal referee for:

Erkenntnis
Philosophy of Science
British Journal for the Philosophy of Science
European Journal for Philosophy of Science
Studies in History and Philosophy of Modern Physics
Mind
Nôus
Foundations of Physics
Critica
Theoría
Dialectica
Synthese

Book referee for:

Oxford University Press
Cambridge University Press

References available from:

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CPNSS
London School of Economics
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Prof. Nicholas Huggett
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alexrose@duke.edu