
CRAIG CALLENDER

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UC San Diego
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Positions

Professor of Philosophy, UC San Diego, 2005-
Co-Director, Institute for Practical Ethics, 2017-
Associate Professor of Philosophy, UC San Diego, 2002-2005
Assistant Professor of Philosophy, UC San Diego, 2000-2002
Senior Lecturer in Philosophy, Logic & Scientific Method, LSE, 2000
Lecturer in Philosophy, Logic & Scientific Method, LSE, 1996-2000

Profile

Philosophy of Science, Philosophy of Physics, Metaphysics

Education

Providence College, BA, Philosophy & Humanities, 1990
Rutgers University, PhD, Philosophy, 1997

Books

1. *What Makes Time Special?*, Oxford University Press, July 2017. Winner of the 2018 Lakatos Award, 2022 Suppes Award.
 2. *The Oxford Handbook of Philosophy of Time*, Editor, Oxford University Press, 2011, 689 pages.
 3. *Introducing Time*, Icon/Totem Press, December 2001. Re-issued as *Introducing Time: A Graphic Guide*, May 2010. Translated into Croatian, Italian, German, French, Thai, Turkish, and others.
 4. *Physics Meets Philosophy at the Planck Scale*, Cambridge University Press, 2001, with Nick Huggett. Translated into Chinese.
 5. *Time, Reality and Experience*, Editor, 2002, Cambridge University Press.
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Articles and Chapters

1. "Screening Out Neurodiversity", with Jada Wiggleton-Little, *Kennedy Institute of Ethics Journal*, forthcoming 2023.
 2. "A Derivation of Exponential Temporal Discounting from Temporal Neutrality" *Philosophy of Science*, forthcoming 2023.
 3. "Humean Laws of Nature: The End of the Good Old Days", Michael Hicks, Siegfried Jaag and Christian Loew (eds.) *Humean Laws for Human Agents*, Oxford: Oxford University Press, forthcoming 2023.
 4. "Going "Humean" on the Flow of Time" with Bosco Garcia, *Frontiers in Psychology*, forthcoming.
 5. "Quantum Mechanics: Keeping It Real" *British Journal for the Philosophy of Science*, 2021.
 6. "Is Discounting for Tense Rational?" Christoph Hoerl, Teresa McCormack and Alison Fernandes (eds.) *Temporal Asymmetries in Philosophy and Psychology*, 2022.
 7. "On the Horns of a Dilemma: Let the Northern White Rhino Vanish or Intervene?" *Ethics, Policy, and Environment*, 2021
 8. "No Time for Time from No-Time" *Philosophy of Science*, with Eugene Chua, 2021.
 9. "The Normative Standard for Future Discounting" *Australian Philosophical Review*, 2021.
 10. "Reply to Critics" *Australian Philosophical Review*, 2021.
 11. "Time in Cosmology" with Casey McCoy, *Routledge Companion to Philosophy of Physics*, 2021.
 12. "Metaphysics in Free Fall", *IAI* 3 Feb 2021.
 13. "Making Science Better: Lessons From the COVID-19 Front", *Issues in Science & Technology*.
 14. "Time, Flow, and Space" *Behavioral and Brain Sciences* 42 (2019). Response to Hoerl and McCormack's BBS target, "Thinking in and about time: A dual systems perspective on temporal cognition"
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15. "Can We Quarantine the Quantum Blight?" *Scientific Realism and the Quantum* (OUP), 2020, edited by Saatsi and French
 16. "Black Hole Thermodynamics: More Than a Formal Analogy?" forthcoming in Ijäs and Loewer's *Guide to Philosophy of Cosmology*, OUP, with John Dougherty.
 17. "Time Lost, Time Regained" Goldman and McLaughlin's *Cognitive Science Meets Metaphysics*, 2019.
 18. "What Becomes of a Causal Set" *British Journal for the Philosophy of Science*, 2015, w/ Chris Wuthrich.
 19. "One World, One Beable" *Synthese* 2014, 1-25.
 20. "Turn and Face the Strange...Ch-ch-changes: Philosophical Questions Raised by Phase Transitions" *Handbook of Philosophy of Physics*, 2013, (ed.) R. Batterman, OUP, with Tarun Menon.
 21. "Thank Goodness That Argument is Over: Explaining the Temporal Value Asymmetry" *Philosopher's Imprint* 2012, 1-16, with Chris Suhler.
 22. "Hot and Heavy Matters in the Foundations of Statistical Mechanics" *Foundations of Physics*, 2011.
 23. "Does Quantum Mechanics Clash with the Equivalence Principle—and Does It Matter?" *European Journal for Philosophy of Science*, 2011, with Elias Okon.
 24. "The Past Histories of Molecules" in *Probabilities in Physics*, Claus Beisbart and Stephan Hartmann's (eds), Oxford University Press, 2011.
 25. "Metaphysics and Philosophy of Science" in *Companion to Philosophy of Science*, Stephen French and Jaahu Saatsi (eds.), Continuum, 2011.
 26. "Time's Ontic Voltage" in *Future of Philosophy of Time*, edited by Adrian Bardon, Routledge, 2011.
 27. "Special Sciences, Conspiracy and the Better Best System Account of Laws", *Erkenntnis*, with Jonathan Cohen, 2010.
 28. "Is Time an Illusion?" *Scientific American*, June 2010. [Reprinted in SciAm's special edition, A Matter of Time 2012. Reprinted as "Why Some Physicists Want to Get Rid of Time", 2014]
 29. "The Past Hypothesis Meets Gravity" in Gerhard Ernst and Andreas Hüttemann (eds.): *Time, Chance and Reduction. Philosophical Aspects of Statistical Mechanics*. Cambridge University Press, 2010.
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30. "A Better Best System Account of Lawhood", with Jonathan Cohen, *Philosophical Studies* 145(1):1-34, 2009.
 31. "The Metaphysics in Quantum Theory", in *Compendium of Quantum Physics: Concepts, Experiments, History and Philosophy*, F. Weinert, K. Hentschel and D. Greenberger (eds.) Springer, 2009.
 32. "On Finding Time in Quantum Mechanics" *Einstein, Relativity, and Absolute Simultaneity*, (ed.) Craig, W.L. and Smith, Q. Routledge Press, 2009.
 33. "Interview on Philosophy of Physics" in *Foundations and Philosophy of Physics*. Juan Ferret (ed.) Automatic Press, 2009.
 34. "The Common Now" *Philosophical Issues*, 18, 339-361, 2008.
 35. "The Emergence and Interpretation of Probability in Bohmian Mechanics" *Studies in History and Philosophy of Modern Physics*, 38, 351-379, 2007.
 36. "There is No Special Problem About Scientific Representation" with Jonathan Cohen, special issue on scientific representation, *Theoria*, 55: 67-85, 2006
 37. "Time in Physics" *Encyclopedia of Philosophy*, 2nd edition, 2005, MacMillian.
 38. "Answers in Search of a Question: 'Proofs' of the Tri-Dimensionality of Space" *Studies in History & Philosophy of Modern Physics*, 36, 113-136, March 2005.
 39. "Realist Ennui and the Base Rate Fallacy" *Philosophy of Science*, 71(3): 320-338. July 2004, with P.D. Magnus.
 40. "Measures, Explanation and Time: Can We Explain the Boundary Conditions of the Universe?" *British Journal for the Philosophy of Science*, 55, 195-217, June 2004.
 41. "Who's Afraid of Maxwell's Demon—and Which One?" *Quantum Limits to the Second Law*, edited by D. Sheehan, American Institute of Physics, December 2002, pp. 399-407. Reprinted as "A Collision Between Dynamics and Thermodynamics" in *Entropy* 2004, 6, 11-20.
 42. "Is There a Puzzle About the Low Entropy Past?" for Hitchcock, C. (ed.) *Contemporary Debates in the Philosophy of Science*, chapter 12, Blackwell, 2003
 43. "Chapter 8: Philosophy of Space-time Physics" in *Blackwell Guide to Philosophy of Science*, edited by Peter Machamer and Michael Silberstein, (Basil Blackwell, 2002), with Carl Hoefer, pp. 173-198..
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44. "Taking Thermodynamics (Too) Seriously" *Studies in the History and Philosophy of Modern Physics*, 32, 4, 2001, 539-53.
 45. "Thermodynamic Time Asymmetry" *The Stanford Encyclopedia of Philosophy* (Winter 2001 Edition), Edward N. Zalta (ed.), URL = <<http://plato.stanford.edu/archives/win2001/entries/time-thermo/>>.
 46. "Physics Meets Philosophy at the Planck Length: Introduction" *Physics Meets Philosophy at the Planck Length*, CUP 2001, with Nick Huggett, 1-32.
 47. "Why Quantize the Gravitational Field (or any other Field for that Matter)?" *Philosophy of Science*, 2001, S382-S394, with Nick Huggett.
 48. "Humean Supervenience and Rotating Homogeneous Matter" *Mind*, 110, Jan. 2000, 25-43.
 49. "Shedding Light on Time" *Philosophy of Science*, 67, 2000, S587-S599.
 50. "Is Time 'Handed' in a Quantum World?" *Proceedings of the Aristotelian Society*, June, 2000, 247-269.
 51. "Introduction" *Studies in the History & Philosophy of Modern Physics*; 2000, 31B, 2, 129-134.
 52. "Topology Change and the Unity of Space" *Studies in the History and Philosophy of Modern Physics*, 31B, 2, 2000, 227-246, with R. Weingard.
 53. "Reducing Thermodynamics to Statistical Mechanics: The Case of Entropy" *Journal of Philosophy*, XCVI, July 1999, 348-373.
 54. "Nonlocality in the Expanding Infinite Well" *Foundations of Physics Letters* 11, 1998, No. 5, 495-98, with R. Weingard.
 55. "The View From No-when" *British Journal for the Philosophy of Science* 49, 1998, 135-159.
 56. "What is 'The Problem of the Direction of Time'?" *Philosophy of Science* 63, v.2, 1997, 223-34.
 57. "Trouble in Paradise? Problems for Bohm's Theory" *Monist*, 1997, 80, 1, 24-43, with R. Weingard.
 58. "Time, Bohm's Theory and Quantum Cosmology" *Philosophy of Science*, 1996, 63, 470-74, with R. Weingard
 59. "Answer to Question #22" ["Is there a gravitational force or not?,"] *American Journal of Physics*, 1996, 64,5, 528, with R. Weingard.
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60. "An Introduction to Topology" *Monist*, 1996, 79, No. 1, 21-33, with R. Weingard.
 61. "Bohmian Cosmology and the Quantum Smearing of the Initial Singularity" *Physics Letters A* 208, 1995, 59-61, with R. Weingard.
 62. "The Metaphysics of Time Reversal: Hutchison on Classical Mechanics" *British Journal for the Philosophy of Science* 1995, 46, No. 3, 331.
 63. "Answer to Question #15 [What space scales participate in cosmic expansion?]" *American Journal of Physics*, 1995, 63,9, 780, with R. Weingard.
 64. "Wilful Ignorance, Knowledge, and the "Equal Culpability" Thesis: A Study of the Deeper Significance of the Principle of Legality" *Wisconsin Law Review*, 1994, 1, 29-69, with D. Husak.
 65. "A Bohmian Model of Quantum Cosmology" *Philosophy of Science* 1994, 1, S228-237, with R. Weingard.

Book reviews

1. "Book Note: "Chance and Temporal Asymmetry" edited by Alistair Wilson", *Australasian Journal of Philosophy*, 2015.
 2. "Review of Ney & Albert's 'The Wave Function: Essays on the Metaphysics of Quantum Mechanics' *British Journal for the Philosophy of Science*, 2014
 3. "There is No Theory of Everything" *New Scientist*, September 2010. (Review of Hawking and Mlodinow's *The Grand Design*.)
 4. "Can the Multiverse Explain Time's Arrow?" *New Scientist*, January 2010. (Review of Carroll's *From Eternity to Here*)
 5. "Review of Robin LePoidevin's *Images of Time*" *Notre Dame Philosophical Reviews*, 2008
 6. "Review of M. Jammer's *Concepts of Simultaneity*" *Isis* 2008, 99, 158-160.
 7. "Not So Cool" *Metascience*, 2007, 16, 147-151.
 8. "Review of J. Butterfield's *Arguments of Time*" *Philosophy of Science*, July 2005.
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9. "Review of C. Liu and G. Emch's Logic of Thermo-Statistical Physics" *Studies in History and Philosophy of Modern Physics*, 2004, 541-544.
 10. "Review of D. Albert's Time and Chance" *Metascience*, 2002, 11, 1, 43-46.
 11. "Review of P. Smith's Explaining Chaos" *Mind* 2001, 439, 839-844.
 12. "Review of J. Earman's Bangs, Crunches, Whimpers and Shrieks" *Philosophical Review* 1998, 107, 142-146.
 13. "Review of J. Cushing, A. Fine and S. Goldstein (eds). Bohmian Mechanics and Quantum Theory: An Appraisal" *British Journal for the Philosophy of Science*, 1998, 49, 332-337.
 14. "Review of H. Price's Time's Arrow and Archimedes' Point" *Metascience*, roundtable review, 1997, 11, 68-71.
 15. "Review of M. Dorato's Time and Reality" *British Journal for the Philosophy of Science*, 1997, 48, 117-20.
 16. "Review of S. Savitt's Time's Arrow Today" *Canadian Philosophical Reviews*, 16, 1, 1996, 59-61.

Conferences organized

1. Time, Reality and Experience. The Royal Institute of Philosophy Annual Conference. Sept 2000, London School of Economics.
2. UCI-UCSD Philosophy of Science Workshop, UCSD, June 2003.
3. Society for Exact Philosophy Annual Meeting, UCSD, May 2006, with Jonathan Cohen.
4. Time, Physics and Philosophy, UCSD, May 18-19, 2012.
5. Time, Physics and the Observer, FQXi, May 2018.

Talks

I've given presentations at many professional philosophy and foundations of physics conferences, universities, workshops, etc. These include talks at Oxford, Cambridge, London, Leeds, Vancouver, Montreal, Toronto, Edinburgh, Tilburg,

Utrecht, Sheffield, Barcelona, Athens, Jerusalem, Konstanz, Cologne, Munich, Constance, Bristol, Brighton, Sydney, Copenhagen, Keflavik, Nancy, Pais, Mexico City, Buenos Aires, in addition to many US cities. Details available upon request.

Professional experience (selected and condensed)

1. President-Elect (2023-), Philosophy of Science Association
 2. President, Philosophy of Time Society, 2017-2020.
 3. Editor, Philosophy of Science section, *Notre Dame Philosophical Reviews*, 2012-
 4. Guest Editor, Entropy, special issue on Arrow of Time, 2012; Studies in the History and Philosophy of Modern Physics, special issue on relativity, 2000
 5. Chair of Local Organizing Committee, PSA-HSS San Diego 2012
 6. Editor, *Philosopher's Compass: Philosophy of Science*, Blackwell, 2004-2007.
 7. Deputy Editor, *British Journal for the Philosophy of Science*, 1997-8.
 8. Associate Editor, *Mind*, 1998-2000.
 9. Governing Board, Philosophy of Science Association, 2006-2009
 10. Lakatos Award Book Selector, 2012-2015
 11. Associate Member, Centre for Philosophy of Time, Università degli Studi di Milano, Italy
 12. Program Committees: Biennial Meeting of Philosophy of Science Association., 2010, 2006, 2002; Pacific APA, 2006-2009; International Society for the Study of Space-time, 2004, 2006; Beyond Spacetime, 2015
 13. National Science Foundation, 3-year term, STS funding panel, 2001-2004
 14. PSA Panel for Best Paper by a Junior Philosopher, 2004
 15. Editorial Advisory Board: both *Studies in the History & Philosophy of Modern Physics* and *Philosophy of Science*
 16. Co-Director of the London School of Economic's CPNSS , 1996-1998.
 17. Management Committee, London School of Economic's CPNSS, 1996-2000.
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18. External PhD examiner in both philosophy and physics, including at Illinois-Chicago, Cambridge University, ANU, Melbourne, Saskatwan.
 19. External accessor for roughly 3-6 external promotions per year, including Cornell, Yale, Rutgers, Columbia, Pittsburgh, Indiana, NYU.
 20. External accessor for many national science foundations, including the NSF, Swiss, Israeli, Dutch, Belgium, and Canadian foundations

Campus (selected and condensed)

1. Chair of Philosophy, 2013-2016
2. Campus Climate Change Committee, Academic Senate, 2021-
3. Graduate Council, 2012-13
4. Director of Philosophy Graduate Studies, 2003-7
5. Chancellor's SPI OMICS Advisory Committee, 2015-
6. Chancellor's SPI "Addressing Disparities..." Advisory Committee, 2015
7. Co-chair, OMICS Search in Bioethics and Biopolicy, 2015-
8. Chair, Muir Executive Committee, 2009-10
9. Stem Cell Advisory Committee, 2014
10. Integrated Stem Cell Advisory Committee, 2015-
11. Muir Environmental Studies Steering Committee, 2005-
12. Alumni Affairs, UC San Diego & You, Los Angeles, 2015, speaker
13. Search Committees in Philosophy, Medicine, Muir, and for campus-wide positions, such as VCR and Dean of Biology.
14. Committee on Affirmative Action and Diversity (CAAD), Fall 2006, FWS 2007-2008.
15. Science Studies Program Executive Board, 2007
16. CEP Subcommittee on Undergraduate Courses, 2009-2010

Awards

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17. UCSD Chancellor's Associates Award for Excellence in Graduate Teaching, 2007
 18. FQXi Third Prize in Essay Competition, 2009
 19. International Collaborator Award, University of Sydney, 2013
 20. UCSD Chancellor's Associates Award for Excellence in Research, 2019
 21. Lakatos Medal, 2018
 22. Suppes Prize, 2022
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