

Dr. Christopher Gregory Weaver

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[Website](#)

[PhilPeople Page](#)

Areas of Specialization, Competence, Scholarly Interests

AOS: History and Philosophy of Physics; Metaphysics; Philosophy of Religion

AOC: Philosophy of Language; Meta-ethics

Areas of Scholarly Interest: Philosophy of Law and Jurisprudence

Employment and Center Membership

August 16th, 2024—Present **University of Illinois at Urbana-Champaign (Department of Physics)**
Brand Fortner Faculty Scholar in Physics

March 18th, 2022—Present **University of Illinois at Urbana-Champaign (Department of Physics)**
Affiliate Associate Professor of Physics

March 18th, 2022—Present **University of Illinois at Urbana-Champaign (Department of Philosophy)**
Associate Professor of Philosophy (Tenured)

2020—Present [Illinois Center for Advanced Studies of the Universe](#)
University of Illinois at Urbana-Champaign
Core Faculty Member

2020—March 17th, 2022 **University of Illinois at Urbana-Champaign (Department of Physics)**
Affiliate Assistant Professor of Physics

2015—March 17th, 2022 **University of Illinois at Urbana-Champaign (Department of Philosophy)**
Assistant Professor of Philosophy (Tenure-track)

Spring 2021 [Center for Philosophy of Science](#), University of Pittsburgh
Visiting Fellow

Education

2010-2015 **Rutgers University, New Brunswick**
PhD in Philosophy (*earned*)
Degree received on May 17th, 2015
Dissertation: *Essays on Causation, Explanation, and the Past Hypothesis*

	Committee: Barry Loewer (Director), David Albert , Tom Banks , and Jonathan Schaffer
2008-2010	Northern Illinois University M.A. in Philosophy Program (program voluntarily discontinued upon transfer to Rutgers University)
2005-2007	Gordon-Conwell Theological Seminary M.A. Theology (<i>earned</i>)
2001-2005	Moody Bible Institute B.A. Biblical Languages (<i>earned</i>)

Publications (Including Work Under Contract)

- (Under Contract) *The Arrow of Time: An Inquiry into the Foundations of Boltzmannian Statistical Mechanics*. Routledge Studies in the Philosophy of Mathematics and Physics.
- (2025) “Hamilton, Hamiltonian Mechanics, and Causation.” *Foundations of Science*. **30**, 281–325. <https://doi.org.proxy2.library.illinois.edu/10.1007/s10699-023-09923-y> (published online in 2023)
- (2025) *Causation in Physics*. Elements Series. Cambridge University Press. (This work is published gold open access.) <https://doi.org/10.1017/9781009234689>
- (2022) “Poincaré, Poincaré Recurrence, and the H-Theorem: A Continued Reassessment of Boltzmannian Statistical Mechanics.” *International Journal of Modern Physics B* (Condensed Matter Physics; Statistical Physics; Atomic, Molecular and Optical Physics). 36 (23): 2230005. ([Available Here](#))
- (2021) “In Praise of Clausius Entropy: Reassessing the Foundations of Boltzmannian Statistical Mechanics”. *Foundations of Physics* 51 (3): Article number 59, pp. 1-64. ([Available Here](#))
- (2020). “On the Argument from Physics and General Relativity”, *Erkenntnis*. 85, 333-373. ([Available Here](#))
- (2019). “Logical Objections to Atheism”, In Graham Oppy (ed.), *A Companion to Atheism and Philosophy*. The Atrium, Southern Gate, Chichester, West Sussex: Wiley Blackwell Publishers. Pp. 451-475. ([Preprint](#) under the title “An Objection to Naturalism and Atheism from Logic”)
- (2019) *Fundamental Causation: Physics, Metaphysics, and the Deep Structure of the World*. (Routledge Studies in Metaphysics). New York: Routledge Publishers. 372 pages. ([Routledge Webpage](#))

- (2018). (with Joshua Rasmussen) “Why is There Anything?”, In Jerry L. Walls and Trent Dougherty (eds.), *Two Dozen (or so) Arguments for God: The Plantinga Project*. Oxford University Press. Pp. 137-156. ([Preprint](#))
- (2017) “On the Carroll-Chen Model”. *Journal for General Philosophy of Science*. 48, 97-124. ([Available Here](#))
- (2016). “Yet Another New Cosmological Argument,” *International Journal for Philosophy of Religion* 80, 11-31. ([Available Here](#))
- (2015). “Evilism, Moral Rationalism, and Reasons Internalism,” *International Journal for Philosophy of Religion* 77, 3-24. ([Available Here](#))
- (2013). “A Church-Fitch Proof for the Universality of Causation,” *Synthese* 190, 2749-2772. ([Available Here](#))
- (2012). “What Could be Caused Must Actually be Caused,” *Synthese* 184, 299-317. ([Available Here](#))
- (2009). “Explanation, Entailment, and Leibnizian Cosmological Arguments,” *Metaphysica* 10, 97-108. ([Available Here](#))

Published Book Reviews

- (2010). “Review of *Persons: Human and Divine*”, edited by Peter van Inwagen and Dean W. Zimmerman. *Faith and Philosophy* 27, 105-111.

Presentations (including Invited Presentations and Interviews)

“On Feynman Diagrams and Causal Models” *PIERS 2025 in Chiba, Japan*, November 5th to November 9th, 2025, <https://chiba2025.piers.org/>

“The Problem of the Arrow of Causation in Fundamental Physics” at the *University of Illinois at Chicago, Laboratory for Quantum Theory at the Extremes* October 24th, 2025 at the Department of Physics, UIC: 845 W Taylor St, Chicago, IL 60607,

“The Problem of the Arrow of Causation in Fundamental Physics” at the *CUNY Graduate Center*, Department of Philosophy, October 15th, 2025, New York, NY.

“On Feynman Diagrams and Causal Models” at the *Society for the Philosophy of Causation* Conference, July 15th to July 18th, 2025, at Maison Suger, Paris, France.

“On Feynman Diagrams and Causal Models” at the *Foundations2025: The 22nd European Conference on Foundations of Physics*, June 30th—July 2nd, 2025, University of Gdańsk, Gdańsk, Poland.

“On Carroll’s Multiverse Model and Boltzmann Brains” at the *Multiverse Conference, Toronto Metropolitan University*: June 16th to June 18th, 2025, Toronto, Canada.

“On Feynman Diagrams and Causal Models” at the *89th Annual Meeting of the Mississippi Academy of Sciences*, Physics and Engineering Division, Biloxi, Mississippi: March 19th to March 21st, 2025. Abstract published in the *Journal of the Mississippi Academy of Sciences*. Volume 70: Issue 1: p. 247.

Interviewed by Jessica Raley on my book *Causation in Physics* for the Illinois Center for Advanced Studies of the Universe at the University of Illinois at Urbana-Champaign posted February 14th, 2025 ([webpage](#))

“The Problem of the Arrow of Causation in Fundamental Physics” at the *Eastern APA*, January 8th, 2025, to January 11th, 2025, New York, NY.

“From Perception to Physical Causation” for the *University of Pittsburgh, Center for Philosophy of Science - Ninth Quadrennial Fellows Conference*, June 2—4, 2024 University of Miami, Florida. June 2nd, 2024: ([Webpage](#))

“On the Argument from Bidirectionality” for the 2024 *Kentucky Philosophical Association* (KPA 2024) meeting at Western Kentucky University. April 27th, 2024: ([Webpage](#))

“Design in Reduction: The Case of Quantum Mechanics” for the *University of Notre Dame History and Philosophy of Science Annual Conference* Unity & Diversity in Science: Philosophical, Historical, and Theological Perspectives. April 4th to April 6th, 2024: ([Webpage](#))

“Who’s Afraid of Causation in Fundamental Science?” for 2023 Causal Inference: Current Trends and the Future of Research” Workshop May 4th, 2023, **Department of Economics**, at the University of Illinois at Urbana-Champaign. (Conference was from May 4th to May 5th, 2023): ([Webpage](#))

“Hamilton, Hamiltonian Mechanics, and Causation” for the 2023 *North Carolina Philosophical Society Conference* at Duke University, March 4th, 2023.

“Introducing the Arrow of Time Puzzle” for the *Pittsburgh Summer Program, Center for Philosophy of Science* at the University of Pittsburgh, July 11th, 2022.

“The Problem of the Arrow of Time” Panel Discussion, *Illinois Center for Advanced Studies of the Universe Inaugural Conference*, University of Illinois at Urbana-Champaign, May 19th, 2022 (Conference was from May 19th to May 21st, 2022): ([Webpage](#))

“Poincaré, Poincaré Recurrence, and the H-Theorem: A Continued Reassessment of Boltzmannian Statistical Mechanics” for the *Ohio Philosophical Association Conference* at the University of Akron presented on April 23rd, 2022. Comments by Siddharth Muthu Krishnan (University of Pittsburgh, History and Philosophy of Science)

“Cold Dark Matter: Models and Explanation” for the *Illinois Center for Advanced Studies of the Universe, Mini symposium on Dark Matter*, October 29th, 2021.

“Introducing the Arrow of Time Puzzle” for the [Pittsburgh Summer Program](#), Center for Philosophy of Science at the University of Pittsburgh, July 15th, 2021 (via Zoom).

Interviewed by Jessica Raley for the Illinois Center for Advanced Studies of the Universe at the University of Illinois at Urbana-Champaign posted May 19th, 2021 ([webpage](#))

“Design in Reduction: The Case of (Non-Relativistic) Quantum Mechanics” presented (via Zoom) for the Princeton University Project in Philosophy of Religion and the Rutgers University Center for Philosophy of Religion Incubator conference on May 17th-May 18th, 2021. ([webpage](#))

“Hamilton, Hamiltonian Mechanics, and Causation” presented (via Zoom) for the Southern California Philosophy of Physics group, May 1st, 2021. ([webpage](#))

“Hamilton, Hamiltonian Mechanics, and Causation” presented (via Zoom) as part of the “Time and Causation” Symposium at the Pacific APA, April 9th, 2021 with commentary by Ned Hall (Harvard University) ([webpage](#))

“Hamilton, Hamiltonian Mechanics, and Causation” presented (via Zoom) for the Center for Philosophy of Science, University of Pittsburgh, April 2nd, 2021.

“Hamilton, Hamiltonian Mechanics, and Causation” presented (via Zoom) for the California Institute of Technology, Philosophy of Physics Reading Group, November 4th, 2020.

“On the Epistemological Isolation (and Debunking) Objection to Causal Hyperrealism” to be presented as part of the “Epistemological Challenges in Causation and Time” Symposium at the Pacific APA, April 8th-12th, 2020 (**Cancelled due to COVID-19**)

“In Praise of Clausius Entropy: Reassessing the Foundations of Boltzmannian Statistical Mechanics” presented at the University of Illinois *Department of Physics* colloquium on January 29th, 2020

“In Praise of Clausius Entropy: Reassessing the Foundations of Boltzmannian Statistical Mechanics” at New York University (NYU), November 13th, 2019 for the NY/NJ (or Metro Area) Philosophy of Science Group ([website](#))

“Design in Reduction: The Case of (Non-Relativistic) Quantum Mechanics” at The Ohio State University, Philosophy Department September 21st, 2018

“Design in Reduction: The Case of (Non-Relativistic) Quantum Mechanics” at the University of Pennsylvania, Philosophy Department, September 14th, 2018

“QED, QCD, and Causal Direction” at The History and Metaphysics of the Laws of Nature Conference at Central European University in Budapest, Hungary, July 12th to July 14th, 2018 ([webpage](#))

Three Summer School Presentations at the Central European University Summer School on the History and Metaphysics of Laws of Nature ([webpage](#)) in Budapest, Hungary, July 2nd to July 10th, 2018. My three talks were:

Talk #1: Foster and Laws of Nature: God, Laws, and the Problem of Induction

Talk #2: Cartwright and Capacities: Laws and Lies?

Talk #3: On the Argument from Physics and General Relativity

“On the Argument from Physics and General Relativity” at Mississippi State University by invitation of the Philosophy Department, Fall 2017

“In Defense of the Causal Relation” at the University of Mississippi by invitation of the Philosophy Department, Fall 2017

“The Price-Weslake Objection” at Baylor University by invitation of the Philosophy Department, Waco, TX: March 14th, 2017

“The Brute Asymmetry of Causation” at the 6th *Midwest Annual Workshop in Metaphysics* (MAWM) at the University of Nebraska-Lincoln on October 14th and 15th, 2016

“The Argument from Metaphysical Teleology” at the Rutgers Mini-Conference: *Multiverse, Theodicy, and Fine-Tuning* at Rutgers University, New Brunswick on June 10th and 11th, 2016 ([webpage](#))

“Fundamental Causation” at the *Central APA*, St. Louis, MO: February 18th to February 21st, 2015.

“Against Causal Reductionism” at the University of Illinois at Urbana-Champaign by invitation of the Philosophy Department, Urbana, IL: February 16th, 2015

“Against Causal Reductionism” at Yale University by invitation of the Philosophy Department, New Haven, CT: February 2nd, 2015

“Against Causal Reductionism” at the *Eastern APA*, Philadelphia, PA: December 27th to December 30th, 2014.

“Yet Another New Cosmological Argument” at the *Western Canadian Philosophical Association*, the University of British Columbia, Canada: October 3rd to October 5th, 2014.

“A Church-Fitch Proof for the Universality of Causation” at the 2012 *Joint Session of the Aristotelian Society and Mind Association*, the University of Sterling, Scotland: July 6th to 8th, 2012.

“Compositional Reductionism and Semantic Anti-Reductionism” at the *Metaphysics of Science Conference*, the University of Melbourne, Australia: July 3rd to July 5th, 2009.

Grants, Honors, and Awards

2023 Teacher Ranked as Outstanding for Spring 2023 PHIL 270 *Philosophy of Science*, University of Illinois at Urbana-Champaign

2021 Teacher Ranked as Outstanding (top 10% of university for teaching effectiveness and overall quality of course) for Fall 2021 PHIL 517 *History and Foundations of Statistical Mechanics*, University of Illinois at Urbana-Champaign

2019 Scholars Travel Fund Award (\$650) Office of the Vice Chancellor for Research Scholars’ Travel Program, University of Illinois at Urbana-Champaign. (Awarded 09/13/2019)

2019 Teacher Ranked as Excellent for Spring 2019 PHIL 471 *Foundations of Statistical Mechanics*, University of Illinois at Urbana-Champaign

2018 Teacher Ranked as Outstanding (top 10% of university for teaching effectiveness and overall quality of course) for Spring 2018 PHIL 103 *Logic and Reasoning*; University of Illinois at Urbana-Champaign

2018 Teacher Ranked as Excellent for Spring 2018 PHIL 471 *Foundations of Quantum Mechanics*, University of Illinois at Urbana-Champaign

2018 Scholars Travel Fund Award (\$1,050) Office of the Vice Chancellor for Research Scholars’ Travel Program, University of Illinois at Urbana-Champaign. (Awarded 04/13/2018)

2017 Teacher Ranked as Excellent for Fall 2017 PHIL 270 *Philosophy of Science*: University of Illinois at Urbana-Champaign

MAC Fellowship awarded by Rutgers University Philosophy Department

2012 Aristotelian Society Subsidy for the 2012 Joint Session of the Aristotelian Society and Mind Association

2012 Small Mellon Grant Award Rutgers University Philosophy Department

2011 Mellon Grant Award Rutgers University Philosophy Department

2009 Rhotin A. Smith Assistantship awarded by Northern Illinois University Philosophy Department

2008 Jeffrey Lunsford Fellowship awarded by Northern Illinois University

2007 Byington Scholarship awarded by Gordon-Conwell Theological Seminary

2005-2007 Michael Hayes Scholarship awarded by Gordon-Conwell Theological Seminary

Academic Service

2025/2026 **Chair of Awards Committee** UIUC Philosophy

2024/2025 **Chair of Awards Committee** UIUC Philosophy

2024/2025 **Faculty Senate Representative** UIUC Philosophy/(Broader) UIUC

2024 **Referee** for *The British Journal for the Philosophy of Science*

2023 **Referee** for *Philosophical Studies*

2023 **Referee** for *Journal of Consciousness Studies*

2023/2024 **Chair of Diversity, Equity and Inclusion Committee** UIUC Philosophy

2023/2024 **Chair of Awards Committee** UIUC Philosophy

2023/2024 **Placement Committee** UIUC Philosophy

2023 **Referee** for *American Journal of Physics*

2023/2024 **Member at Large Section L in the Steering Group, History and Philosophy of Science** for the American Association for the Advancement of Science

2022/2023 **Ad Hoc Departmental Bylaws Committee** UIUC Philosophy

2022/2023 **Placement Committee** UIUC Philosophy

2022/2023 **Awards Committee** UIUC Philosophy

2022/2023 **Chair of Diversity, Equity and Inclusion Committee** UIUC Philosophy

2022/2023 **Graduate Programs Committee** UIUC Philosophy

2022/2023 **Colloquium Committee** UIUC Philosophy

2022/2023 **Faculty Senate Representative** UIUC Philosophy/(Broader) UIUC

2021-2022 (some work still in 2023) **Program Committee Member** for the 2022 PSA (Philosophy of Science Association)

2022 **Referee** for *Oxford Studies in Philosophy of Religion*

2022 **Referee** for *Mind*

2022 **Presenter** for the [Pittsburgh Summer Program](#), Center for Philosophy of Science at the University of Pittsburgh, Summer 2022.

2021-2022 **Placement Committee**, University of Illinois at Urbana-Champaign Philosophy Department

2021-2022 **Diversity, Equity, and Inclusion Committee**, University of Illinois at Urbana-Champaign Philosophy Department

2021 **Volunteer Presenter** for the [Pittsburgh Summer Program](#), Center for Philosophy of Science at the University of Pittsburgh, July 15th, 2021 (via Zoom).

2021 **Referee** for *Wiley Blackwell Publishers*

2021 **Referee** for *Philosophy of Science*

2021 **Referee** for *Erkenntnis*

2020-2021 **Colloquium Committee**, University of Illinois at Urbana-Champaign
Philosophy Department

2020-2021 **Alleged Capricious Grading Committee**, University of Illinois at Urbana-Champaign
Philosophy Department

Co-organizer of the *Causation and Reduction: From Metaphysics to the Sciences Conference* (the keynote speaker for this conference was John D. Norton (University of Pittsburgh); The conference was conducted using Zoom because of COVID-19.

2020 **Referee** for *Inquiry: An Interdisciplinary Journal of Philosophy*

2020 **Referee** for *Synthese*

2019 **Referee** for *The British Journal for the Philosophy of Science*

2019 **Referee** for *Philosophy of Science*

2019 **Referee** for *American Philosophical Quarterly*

2019 **Referee** for *Synthese*

2018 **Referee** for *The Philosophical Quarterly*

2018 **Referee** for *Synthese*

2017 **Referee** for *American Philosophical Quarterly*

2017 **Referee** for *The Australasian Journal of Philosophy*

2017 **Referee** for *The British Journal for the Philosophy of Science*

2017 **Referee** for *International Studies in Philosophy of Science*

2016 **Referee** for *Synthese*

2016 **Referee** for *Religious Studies*

2019-2020 Chair of **ad hoc Undergraduate Philosophy Conference Committee**

2019-2020 **Colloquium Committee**, University of Illinois at Urbana-Champaign
Philosophy Department

2018-2019 **Colloquium Committee**, University of Illinois at Urbana-Champaign
Philosophy Department

2018-2019 **Graduate Program Committee**, University of Illinois at Urbana-Champaign
Philosophy Department

2017-2018 **Alleged Capricious Grading Committee**, University of Illinois at Urbana-Champaign
Philosophy Department

2016-2018 **Colloquium Committee**, University of Illinois at Urbana-Champaign
Philosophy Department

2015-2016 **Alleged Capricious Grading Committee**, University of Illinois at Urbana-Champaign
Philosophy Department

2015-2016 **Prizes and Scholarships Committee**, University of Illinois at Urbana-Champaign
Philosophy Department

2013-2014 **Editing Assistant** for Andy Egan for *The Ethics of Food* OUP anthology

Spring 2014 **Conference Organizer** for the *Philosophy of Cosmology Workshop* at Rutgers University

2013-2014 **Departmental Treasurer** for the Rutgers University *Philosophy Department Graduate Student Organization* (part of the *Graduate Student Association*)

Spring 2014 **Grader** for Janelle Derstine's *Logic, Reasoning, and Persuasion* Spring 2014 Phil. 730:101

Fall 2013 **Grader** for Katalin Balog's *Introduction to Philosophy* Fall 2013 Phil. 730:103

Spring 2013 **Grader** for Trip McCrossin's *Logic, Reasoning and Persuasion* Spring 2013
Phil. 730:101
Fall 2012 **Grader** for Martin Lin's *Introduction to Philosophy* Fall 2012 Phil. 730:104
Fall 2010 **Grader** for Alan Code's *Plato and Aristotle* Fall 2010 Phil. 730: 302
Summer 2010 **Assisted** Howard McGary with the *Summer Institute for Diversity in Philosophy*
2009-2010 **Philosophy Representative** Northern Illinois University: Philosophy Graduate
School Committee (elected by peers)

References

Professor David Z. Albert – Frederick E. Woodbridge Professor of Philosophy at Columbia University 706 Philosophy Hall Mail Code: 4971 New York, NY 10027
da5@columbia.edu

Professor Valia Allori – Associate Professor of Philosophy at Northern Illinois University Zulauf Hall 915 DeKalb, IL 60115 vallori@niu.edu

Professor Tom Banks – Professor of Physics Department of Physics and Astronomy Rutgers University 136 Frelinghuysen Road Piscataway, NJ 08854-8019
banks@physics.rutgers.edu

Professor Ned Hall – Norman E. Vuilleumier Professor of Philosophy, Harvard University; Emerson Hall 25 Quincy Street, Cambridge, MA 02138; ehall@fas.harvard.edu

Professor Hans Halvorson – Stuart Professor of Philosophy at Princeton University, 220 1879 Hall Princeton, New Jersey 08544 hhalvors@princeton.edu

Professor Gilbert Holder – Brand and Monica Fortner Endowed Chair in Theoretical Astrophysics Department of Physics, University of Illinois at Urbana-Champaign; 1110 West Green ST, Urbana IL 61801 gholder@illinois.edu

Professor Nick Huggett – LAS Distinguished Professor of Philosophy, Laboratory for Quantum Theory at the Extremes, University of Illinois Chicago; 601 S. Morgan St., 1421 UH Chicago, IL 60607 huggett@uic.edu

Professor Richard Lints – Provost and Andrew Mutch Distinguished Professor of Theology Gordon-Conwell Theological Seminary Hamilton, MA 01982 rlints@gcts.edu

Professor Barry Loewer – Emeritus Professor of Philosophy Rutgers University 106 Somerset St. New Brunswick, NJ 08901 loewer@rci.rutgers.edu

Professor Edouard Machery – Distinguished Professor in the Department of History and Philosophy of Science, University of Pittsburgh; the Director of the Center for Philosophy of Science at the University of Pittsburgh; Member of the Center for the Neural Basis of Cognition at the University of Pittsburgh and Carnegie Mellon University. 1117 CL Pittsburgh, PA 15260 USA machery@pitt.edu

Professor Jonathan Schaffer – Distinguished Professor of Philosophy Rutgers University
106 Somerset St. New Brunswick, NJ 08901 jonathan.schaffer@rutgers.edu

Professor David Sepkoski – Thomas M. Siebel Chair in History of Science at the University
of Illinois. History, 301 Gregory Hall 810 S. Wright Street M/C 466 Urbana, IL 61801
sepkoski@illinois.edu

Professor Nicolas Yunes - Professor and Director of the Illinois Center for Advanced
Studies of the Universe, Department of Physics University of Illinois at Urbana-
Champaign; 1110 West Green ST, Urbana IL 61801 nyunes@illinois.edu

Professor Dean W. Zimmerman – Professor of Philosophy, Founder and Director of the
Rutgers Center for Philosophy of Religion at Rutgers University 106 Somerset St. New
Brunswick, NJ 08901 dwzimmer@rci.rutgers.edu