

Wesley H. Holliday

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University of California, Berkeley

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Curriculum Vitæ¹

Academic Positions

- July 2021 - **Professor**, *Department of Philosophy, UC Berkeley.*
- July 2017 to June 2021 **Associate Professor**, *Department of Philosophy, UC Berkeley.*
- May 2013 - **Faculty Member**, *Group in Logic and the Methodology of Science, UC Berkeley.*
- July 2012 to June 2017 **Assistant Professor**, *Department of Philosophy, UC Berkeley.*

Education

- June 2012 **Ph.D., Philosophy**, *Stanford University.*
Dissertation: *Knowing What Follows: Epistemic Closure and Epistemic Logic*
Committee: Johan van Benthem and Krista Lawlor (co-chairs), Helen Longino, Eric Pacuit
- June 2007 **B.A. with Honors, Philosophy**, *Stanford University.*
Thesis: *The Myth of Multiple Realization*
Thesis Advisor: John Perry

Publications

forthcoming

- 2023 **Split Cycle: A New Condorcet Consistent Voting Method Independent of Clones and Immune to Spoilers** 📄
with Eric Pacuit, forthcoming in *Public Choice*. arXiv:2004.02350 [cs.GT].
- 2023 **Stable Voting** 📄
with Eric Pacuit, forthcoming in *Constitutional Political Economy*. doi 10.1007/s10602-022-09383-9. arXiv:2108.00542 [econ.TH].
- 2023 **Impossibility theorems involving weakenings of expansion consistency and resoluteness in voting** 📄
with Chase Norman, Eric Pacuit, and Saam Zahedian, forthcoming in a volume of *Contemporary Mathematics* on "The Mathematics of Decisions, Elections and Games," eds. Michael A. Jones, David McCune, and Jennifer Wilson. arXiv:2208.06907 [econ.TH].
- 2023 **Possibility Frames and Forcing for Modal Logic**
forthcoming in *The Australasian Journal of Logic*.

¹Current as of May 12, 2023. Latest version at philosophy.berkeley.edu/holliday.

in journals and books

- 2023 **A fundamental non-classical logic** 
Logics, Vol. 1, 36-79. doi 10.3390/logics1010004. arXiv:2207.06993 [math.LO]
- 2022 **Compatibility and accessibility: lattices representations for semantics of non-classical and modal logics** 
in *Advances in Modal Logic*, Vol. 14, eds. David Fernández Duque, Alessandra Palmigiano, and Sophie Pinchinat, College Publications, 507-529. arXiv:2201.07098 [math.LO].
- 2022 **Compatibility, compossibility, and epistemic modality** 
with Matthew Mandelkern, in *Proceedings of the 23rd Amsterdam Colloquium*, 120-126.
- 2021 **Axioms for Defeat in Democratic Elections** 
with Eric Pacuit, *Journal of Theoretical Politics*, Vol. 33, No. 4, 475-524.
doi 10.1177/09516298211043236
- 2021 **Possibility Semantics** 
in *Selected Topics from Contemporary Logics*, ed. Melvin Fitting, Vol. 2 of *Landscapes in Logic*, College Publications, 363-476.
- 2021 **Does Amy Know Ben Knows You Know Your Cards? A Computational Model of Higher-Order Epistemic Reasoning** 
with Zhang Cedegao and Huang Ham, in *Proceedings of the 43rd Annual Meeting of the Cognitive Science Society*, 2588-2594, e-ISSN: 1069-7977.
- 2021 **Measuring Violations of Positive Involvement in Voting** 
with Eric Pacuit, *Proceedings of Theoretical Aspects of Rationality and Knowledge (TARK) 2021*, eds. J. Y. Halpern and A. Perea, *Electronic Proceedings in Theoretical Computer Science*, Vol. 335, 189-209. doi 10.4204/EPTCS.335.17.
- 2021 **Logics of Imprecise Comparative Probability** 
with Yifeng Ding and Thomas Icard, *International Journal of Approximate Reasoning*, Vol. 132, 154-180. doi 10.1016/j.ijar.2021.02.004
- 2021 **Three roads to complete lattices: order, compatibility, polarity** 
Algebra Universalis, Vol. 82, No. 2, article 26. doi 10.1007/s00012-021-00711-y
- 2020 **The Logic of Comparative Cardinality** 
with Yifeng Ding and Matthew Harrison-Trainer, *The Journal of Symbolic Logic*, Vol. 85, No. 3, 972-1005. doi 10.1017/jsl.2019.67
- 2020 **Inquisitive Intuitionistic Logic** 
in *Advances in Modal Logic*, Vol. 13, eds. Nicola Olivetti, Rineke Verbrugge, Sara Negri, and Gabriel Sandu, College Publications, 329-348.
- 2020 **Another Problem in Possible World Semantics** 
with Yifeng Ding, in *Advances in Modal Logic*, Vol. 13, eds. Nicola Olivetti, Rineke Verbrugge, Sara Negri, and Gabriel Sandu, College Publications, 149-168.
- 2020 **A note on Murakami's theorems and incomplete social choice without the Pareto principle** 
with Mikayla Kelley, in *Social Choice and Welfare*, Vol. 55, 243-253. doi 10.1007/s00355-020-01238-2
- 2020 **Choice-Free Stone Duality** 
with Nick Bezhanishvili, in *The Journal of Symbolic Logic*, Vol. 85, No. 1, 109-148. doi 10.1017/jsl.2019.11

- 2020 **Arrow's Decisive Coalitions** 
with Eric Pacuit, in *Social Choice and Welfare*, Vol. 54, 463-505, special issue in Memory of Kenneth J. Arrow, eds. Eric Maskin, Amartya Sen, and Kotaro Suzumura. doi 10.1007/s00355-018-1163-z
- 2019 **Complete Additivity and Modal Incompleteness** 
with Tadeusz Litak, in *The Review of Symbolic Logic*, Vol. 12, No. 3, 487-535. doi 10.1017/S1755020317000259
- 2019 **Strategic Voting Under Uncertainty About the Voting Method** 
with Eric Pacuit, in *Proceedings of Theoretical Aspects of Rationality and Knowledge (TARK) 2019*, ed. Larry Moss, *Electronic Proceedings in Theoretical Computer Science*, Vol. 297, 252-72. doi 10.4204/EPTCS.297.17
- 2019 **When Do Introspection Axioms Matter for Multi-Agent Epistemic Reasoning?** 
with Yifeng Ding and Cedegao Zhang, in *Proceedings of Theoretical Aspects of Rationality and Knowledge (TARK) 2019*, ed. Larry Moss, *Electronic Proceedings in Theoretical Computer Science*, Vol. 297, 121-39. doi 10.4204/EPTCS.297.9
- 2019 **A Semantic Hierarchy for Intuitionistic Logic** 
with Guram Bezhanishvili, in *Indagationes Mathematicae*, Vol. 30, No. 3, 403-469, special issue on "L.E.J. Brouwer after fifty years," eds. Dirk van Dalen, Geurt Jongbloed, Jan Willem Klop, and Jan van Mill. doi 10.1016/j.indag.2019.01.001
- 2019 **A Note on Algebraic Semantics for S5 with Propositional Quantifiers** 
Notre Dame Journal of Formal Logic, Vol. 60, No. 2, 311-332. doi 10.1215/00294527-2019-0001
- 2019 **Algebraic and Topological Semantics for Inquisitive Logic via Choice-Free Duality** 
with Nick Bezhanishvili and Gianluca Grilletti, in *Logic, Language, Information, and Computation. WoLLIC 2019*, eds. R. Iemhoff, M. Moortgat, R. de Queiroz, *Lecture Notes in Computer Science*, Vol. 11541, 35-52. doi 10.1007/978-3-662-59533-6_3
- 2018 **One Modal Logic to Rule Them All?** 
with Tadeusz Litak, in *Advances in Modal Logic*, Vol. 12, eds. G. Bezhanishvili, G. D'Agostino, G. Metcalfe, and T. Studer (London: College Publications), 367-386.
Extended technical report at <https://escholarship.org/uc/item/07v9360j> 
- 2018 **Axiomatization in the Meaning Sciences** 
with Thomas Icard, in *The Science of Meaning: Essays on the Metatheory of Natural Language Semantics*, eds. Derek Ball and Brian Rabern (Oxford University Press), 73-97.
- 2018 **Knowledge, Time, and Paradox: Introducing Sequential Epistemic Logic** 
in *Outstanding Contributions to Logic: Jaakko Hintikka on Knowledge and Game-Theoretical Semantics*, eds. H. van Ditmarsch and G. Sandu (Springer), 363-394. doi 10.1007/978-3-319-62864-6
- 2018 **Inferring Probability Comparisons** 
with Matthew Harrison-Trainor and Thomas Icard, in *Mathematical Social Sciences*, Vol. 91, 62-70. doi 10.1016/j.mathsocsci.2017.08.003
- 2018 **Epistemic Logic and Epistemology** 
in *Introduction to Formal Philosophy*, eds. S.O. Hansson and V.F. Hendricks (Springer), 351-369. doi 10.1007/978-3-319-77434-3
- 2017 **Indicative Conditionals and Dynamic Epistemic Logic** 
with Thomas Icard, in *Proceedings of Theoretical Aspects of Rationality and Knowledge (TARK) 2017*, ed. Jérôme Lang, *Electronic Proceedings in Theoretical Computer Science*, Vol. 251, 2017, pp. 337-351. doi 10.4204/EPTCS.251.24

- 2017 **A Bimodal Perspective on Possibility Semantics** 
with Johan van Benthem and Nick Bezhanishvili, in *Journal of Logic and Computation*, Vol. 27, No. 5, 1353-1389. doi 10.1093/logcom/exw024
- 2017 **Preferential Structures for Comparative Probabilistic Reasoning** 
with Matthew Harrison-Trainor and Thomas Icard, in *Proceedings of the Thirty-First AAAI Conference on Artificial Intelligence* (AAAI Publications), 1135-1141.
- 2017 **On the Modal Logic of Subset and Superset: Tense Logic over Medvedev Frames** 
Studia Logica, Vol. 105, No. 1, 13-35. doi 10.1007/s11225-016-9680-1
- 2017 **Freedom and Modality** 
in *Being, Freedom, and Method: Themes from the Philosophy of Peter van Inwagen*, ed. John Keller (Oxford University Press), 149-156.
- 2016 **Locales, Nuclei, and Dragalin Frames** 
with Guram Bezhanishvili, in *Advances in Modal Logic*, Vol. 11, eds. L. Beklemishev and S. Demri (London: College Publications), 177-196.
- 2016 **On Being in an Undiscoverable Position** 
Thought: A Journal of Philosophy, Vol. 5, No. 1, 33-40. doi 10.1002/tht3.191.
- 2016 **A Note on Cancellation Axioms for Comparative Probability** 
with Matthew Harrison-Trainor and Thomas Icard, in *Theory and Decision*, Vol. 80, No. 1, 159-166. doi 10.1007/s11238-015-9491-2.
- 2015 **Fallibilism and Multiple Paths to Knowledge** 
Oxford Studies in Epistemology, Vol. 5, eds. Tamar Gendler and John Hawthorne, 97-144.
- 2015 **Epistemic Closure and Epistemic Logic I: Relevant Alternatives and Subjunctivism** 
Journal of Philosophical Logic, Vol. 44, No. 1, 1-62. doi 10.1007/s10992-013-9306-2.
- 2014 **Partiality and Adjointness in Modal Logic** 
Advances in Modal Logic, Vol. 10, eds. Rajeev Goré, Barteld Kooi, and Agi Kurucz (London: College Publications), 313-332.
- 2014 **Roles, Rigidity, and Quantification in Epistemic Logic** 
with John Perry, in *Outstanding Contributions to Logic: Johan van Benthem on Logic and Informational Dynamics*, eds. A. Baltag and S. Smets (Springer), 591-629. doi 10.1007/978-3-319-06025-5_22
- 2013 **Epistemic Closure and Epistemic Logic I: Relevant Alternatives and Subjunctivism. A Summary**  and **Response to Egré and Xu** 
in *Logic Across the University: Foundations and Applications*, eds. Johan van Benthem and Fenrong Liu (London: College Publications), 23-31 and 39-46.
- 2013 **Measure Semantics and Qualitative Semantics for Epistemic Modals** 
with Thomas Icard, in *SALT (Semantics and Linguistic Theory)* 23, 514-534.
- 2013 **Information Dynamics and Uniform Substitution** 
with Tomohiro Hoshi and Thomas Icard, in *Synthese*, Vol. 190, 31-55. doi 10.1007/s11229-013-0278-0.
- 2012 **Epistemic Logic, Relevant Alternatives, and the Dynamics of Context** 
in *New Directions in Logic, Language, and Computation*, eds. D. Lassiter and M. Slavkovik, *Lecture Notes in Computer Science*, Vol. 7415, 109-129. doi 10.1007/978-3-642-31467-4_8.
- 2012 **Freedom and the Fixity of the Past** 
Philosophical Review, Vol. 121, No. 2, 179-207. doi 10.1215/00318108-1539080.

- 2012 **A Uniform Logic of Information Dynamics** 
with Tomohiro Hoshi and Thomas Icard, in *Advances in Modal Logic*, Vol. 9, eds. T. Bolander, T. Braüner, S. Ghilardi, and L. Moss (London: College Publications), 348-367.
- 2010 **Moorean Phenomena in Epistemic Logic** 
with Thomas Icard, in *Advances in Modal Logic*, Vol. 8, eds. L. Beklemishev, V. Goranko, and V. Shehtman (London: College Publications), 178-199.
- [working papers](#)
- 2021 **Escaping Arrow's Theorem: The Advantage-Standard Model** 
with Mikayla Kelley, arXiv:2108.01134 [econ.TH]
- 2018 **Possibility Frames and Forcing for Modal Logic** 
UC Berkeley Working Paper in Logic and the Methodology of Science
- 2016 **Simplifying the Surprise Exam** 
UC Berkeley Working Paper in Philosophy
- [edited books](#)
- 2019 English edition of Leo Esakia's *Heyting Algebras: Duality Theory* 
co-edited with Guram Bezhanishvili, published in *Trends in Logic*, Springer
- [edited special issues and proceedings](#)
- 2018 Special Issue of *Journal of Logic and Computation* (Vol. 28, No. 2, March 2018) with papers from the LORI-V conference
co-edited with Wiebe van der Hoek and Wen-fang Wang. doi 10.1093/logcom/exx037
- 2018 Special Issue of *Synthese* (Vol. 195) with papers from the LORI-V conference
co-edited with Wiebe van der Hoek and Wen-fang Wang. doi 10.1007/s11229-017-1640-4
- 2015 **Logic, Rationality, and Interaction** 
co-edited with Wiebe van der Hoek and Wen-fang Wang, *FoLLI Publications on Logic, Language and Information*, Springer. doi 10.1007/978-3-662-48561-3
- [in proceedings and yearbooks](#)
- 2012 **A Uniform Logic of Information Update**
with Tomohiro Hoshi and Thomas Icard, in *Logic and Interactive Rationality. Seminar's Yearbook 2011*, eds. A. Baltag, D. Grossi, A. Marcoci, B. Rodenhäuser, and S. Smets (ILLC, Universiteit van Amsterdam), 203-230. [Preprint of "A Uniform Logic of Information Dynamics"](#) above.
- 2011 **Schematic Validity in Dynamic Epistemic Logic: Decidability**
with Tomohiro Hoshi and Thomas Icard, in *Logic, Rationality, and Interaction*, eds. H. van Ditmarsch, J. Lang, and S. Ju, *Lecture Notes in Artificial Intelligence*, Vol. 6953, 87-96. [Superseded by "Information Dynamics and Uniform Substitution"](#) above.
- 2011 **Epistemic Closure and Epistemic Logic I**
in *Logic and Interactive Rationality. Seminar's Yearbook 2010*, eds. D. Grossi, S. Minica, B. Rodenhäuser, and S. Smets (ILLC, Universiteit van Amsterdam), 80-110. [Superseded by "Epistemic Closure and Epistemic Logic I: Relevant Alternatives and Subjunctivism"](#) above.
- 2010 **Epistemic Logic and Relevant Alternatives**
in *Proceedings of the 15th Student Session of the European Summer School in Logic, Language, and Information*, ed. M. Slavkovik, 4-16. [Superseded by "Epistemic Logic, Relevant Alternatives, and the Dynamics of Context"](#) above.

- 2010 **Trust and the Dynamics of Testimony**
in *Logic and Interactive Rationality. Seminar's Yearbook 2009*, eds. D. Grossi, L. Kurzen, and F. Velázquez-Quesada (ILLC, Universiteit van Amsterdam), 147-178.

Awards

- 2016 **Regents' Junior Faculty Fellowship**, UC Berkeley.
2015 **Humanities Research Fellowship**, UC Berkeley.
2013 **E. W. Beth Dissertation Prize**, Association for Logic, Language, and Information.
2010 **Springer Award Second Prize Paper**, European Summer School in Logic, Language, and Information Student Session, University of Copenhagen.
2010 **Graduate Research Opportunities Award**, Stanford University.
2007 **Suppes Award for Excellence in Philosophy**, Stanford University.
2007 **Robert M. Golden Medal for Excellence in the Humanities and Creative Arts**, Stanford University.
2007 **Prize for Advanced Study in the Humanities**, Stanford University.
2007 **Deans' Award for Academic Accomplishment**, Stanford University.
2007 **J. E. Wallace Sterling Award for Scholastic Achievement**, Stanford University.
2006 **Phi Beta Kappa**.
2004 **President's Award for Academic Excellence in the Freshman Year**, Stanford University.
2003 **National Merit Finalist**.

Presentations

upcoming

A new semantics for conditionals

- 6/18-22/2023 *Logica 2023*, The Premonstratensian Monastery of Teplá, Czech Republic

TBA

- 8/14/2023 *Special Session on Decisions and Fairness*, Applied Mathematics, Modeling and Computational Science (AMMCS) 2023, Waterloo, Canada

invited

Adventures in Non-Classical Logic I and II

- 5/20/2023, Wuhan University (online)
5/27/2023

The Orthologic of Epistemic Modals

- 5/12/2023 *Tsinghua Logic Salon*, Tsinghua University (online)
2/03/2022 with Matthew Mandelkern (NYU) in the *Logic and Interactive Rationality (LIRa) Seminar*, University of Amsterdam

How to design elections for the inclusion of more candidates and more voters

- 3/16-8/2023 *60th Annual Meeting of the Public Choice Society*, Seattle, Washington

Regularity for relative likelihood

- 12/15/2022 *Mini-conference on Infinity* organized by Paolo Mancosu in Paris (online)

Fundamental logic

12/9/2022 [Philosophy Colloquium](#), New York University

A partial-state space model of unawareness

12/2/2022 [Zoom mini-workshop on epistemic logic with unawareness](#) organized by Burkhard C. Schipper, Department of Economics, UC Davis

Subsystems of classical logic and their semantics based on graphs

10/4/2022 [UPenn Logic Seminar](#), Department of Mathematics, University of Pennsylvania (online)

9/27/2022 Invited Lecture at [Colloquium Logicum](#), University of Konstanz, Germany

10/21/2022 [Logic Colloquium](#), University of California, Berkeley

Non-classical modal logic for natural language

8/22/2022 Invited Lecture at [Advances in Modal Logic](#), Rennes, France

Considerations on multiwinner voting

4/15/2022 Election Town Hall, [Mathematics Graduate Student Association](#) (MGSA), UC Berkeley

An approach to generalizing some impossibility theorems in social choice

4/08/2022 Special session on [The Mathematics of Decisions, Elections, and Games](#) at the Joint Mathematics Meeting, Seattle, WA

Stable Voting

12/7/2021 [Online Social Choice Seminar](#), <https://sites.google.com/view/2021onlinescwseminars>

Splitting Cycles, Breaking Ties

10/29/2021 [Logic and Philosophy of Science Colloquium](#) (online), UC Irvine

10/8/2021 [Philosophy Colloquium](#) (online), Carnegie Mellon University

Logical Perspectives on Voting

10/16/2021 Keynote lecture at [LORI-VIII](#) (online), Xi'an, China

Recent Work on Higher-Order Epistemic Reasoning

6/15/2021 [LOGOS online workshop on issues in epistemology and epistemic logic](#) (online), University of Barcelona

Toward choice-free Esakia duality

6/12/2021 [BLAST 2021](#) (online), Special Session on Stone and Priestley Dualities, University of New Mexico

Adventures Beyond Possible Worlds

6/7/2021 [Logical Perspectives 2021](#) (online), Steklov Mathematical Institute, Moscow

Logics of Imprecise, Comparative, and Regular Probability

5/20/2021 [Milano Logic Group Seminar](#) (online), University of Milan

Logics of Imprecise Comparative Probability

3/15/2021 [Logic Online Seminar](#), Steklov Mathematical Institute, Moscow

The Split Cycle Voting Method

2/2/2021 [Online Social Choice Seminar](#), <https://sites.google.com/view/2021onlinescwseminars>

Possibilities for Provability

10/30/2020 [Logic Webinar](#), Department of Mathematics and Statistics, IIT Kanpur

- From choice-free Stone duality to choice-free model theory?**
6/24/2020 [Algebra|Coalgebra Seminar](#) (online), ILLC, University of Amsterdam
- Possibility Semantics**
6/4/2020 [Munich Center for Mathematical Philosophy](#) (online)
12/06/2019 [Philosophy Colloquium](#), University of Maryland, College Park
- Extensions of choice-free Stone duality**
5/28/2020 [Online Logic Seminar](#), Department of Mathematics, Southern Illinois University
- Escaping Arrow's Theorem**
3/7/2020 [TEAM Conference](#), Princeton University
- Axiomatizing Reasoning About Sets: Cardinality, Mereology, and Decisiveness**
1/17/2020 [ASL Winter Meeting](#) (with Joint Mathematics Meetings), Denver
- Split Cycle: A New Method of Voting**
11/20/2019 [Logic Seminar](#), Stanford University
- Axiomatizing Reasoning About Sets: Cardinality, Mereology, and Decisiveness**
10/15/2019 [Logic Seminar](#), Peking University, China
- Possibility Semantics**
10/12/2019 [International Conference on Modality, Logic and Philosophy](#), Peking University, China
- Possibility Semantics**
6/19/2019 Plenary talk at [Topology, Algebra, and Categories in Logic \(TACL\) 2019](#), Nice, France
- New Barriers to Strategic Voting**
5/1/2019 [Center for Human-Compatible AI: Interdisciplinary Insights Seminar](#), UC Berkeley
- Inquisitive Intuitionistic Logic: An Application of Nuclear Semantics**
1/25/2019 [SYSMICS 2019](#), University of Amsterdam
- Another Problem in Possible World Semantics**
10/19/2018 [UC San Diego Philosophy Colloquium](#)
- Possibilities for Boolean, Heyting, and modal algebras**
9/14/2018 [SYSMICS Workshop on Duality in Algebra and Logic](#), Chapman University
11/18/2017 [UC Berkeley Logic Colloquium](#)
- Choice-Free Stone Duality**
8/6/2018 Plenary talk at [BLAST 2018](#), University of Denver
7/3/2018 [International Workshop on Topological Methods in Logic \(ToLo\) VI](#), Ilia State University
- A Semantic Hierarchy for Intuitionistic Logic with Connections to Inquisitive Logic**
7/25/2018 [Workshop on Inquisitive Logic](#), University of Amsterdam
- A Semantic Hierarchy for Intuitionistic Logic**
07/05/2018 [International Workshop on Topological Methods in Logic \(ToLo\) VI](#), Ilia State University
06/04/2017 [6th CSLI Workshop on Logic, Rationality, and Intelligent Interaction](#), Stanford University
10/14/2016 [UC Irvine Logic and Philosophy of Science Colloquium](#)

- From Worlds to Possibilities...and Back?**
6/14/2018 [Workshop on Philosophical Applications of Modal Logic](#), University of Oslo
- Possibility Semantics: A User's Guide**
4/21/2018 [TEAM Conference](#), Princeton University
- Possibility Semantics**
2/23/2018 [Symposium on Truthmaker Semantics](#), Central APA, Chicago
- Possibilities for Modal Logic**
07/28/2017 [Workshop on Modality and Truthmaking](#), Augsburg, Germany
- Complete Additivity and Modal Incompleteness**
06/17/2016 presented by co-author, Tadeusz Litak, at [ToLo-V](#) (International Workshop on Topological Methods in Logic V), Tbilisi, Georgia
- Complete Additivity and Modal Incompleteness**
05/24/2016 [Stanford University](#) Logic Seminar
- An Introduction to Possibility Semantics**
05/20/2016 [UC Davis](#) LLEMMMa Group
- Duality Theory for Possibility Frames and Boolean Algebras with Operators**
11/12/2015 [New Mexico State University](#) Mathematics Colloquium
- Possibilities for Modal Logic**
05/30/2015 [4th CSLI Workshop on Logic, Rationality, and Intelligent Interaction](#), Stanford University
- On Possibility Semantics for Modal Logic**
04/07/2015 [Hans Kamp Seminar in Logic and Language](#), UT Austin
- Beyond Worlds**
04/06/2015 [UT Austin](#) Philosophy Colloquium
- From Beth to van Benthem: Possibilities for Intuitionistic, Classical, and Modal Logic**
09/27/2014 [Workshop on the Future of Logic](#), Celebration event in honour of Johan van Benthem, ILLC, University of Amsterdam
- Knowledge, Time, and Paradox: Introducing Sequential Epistemic Logic**
06/19/2014 [LogiCIC mini-workshop on The Dynamics of Information States](#), ILLC, University of Amsterdam
- Knowledge, Fallibility, and Probability**
05/20/2014 Keynote at [London-Berkeley Philosophy Conference](#), Institute of Philosophy, University of London
- The Multipath Picture of Knowledge**
04/18/2014 [Invited Symposium on Epistemic Logic and Formal Epistemology](#), 2014 Pacific APA
- Partiality and Adjointness in Modal Logic**
04/12/2014 [Center for Formal Epistemology](#), Modal Logic Workshop, Carnegie Mellon University
- Epistemic Closure and Epistemic Logic**
10/14/2013 [Logic Across the University: Foundations and Applications](#), Tsinghua University, China

Logic, Probability, and Epistemic Modality with Thomas Icard
(or **Measure Semantics and Qualitative Semantics for Epistemic Modals**)

- 06/13/2013 Nuance Silicon Valley NLU Discussion Group (NuSVN), Nuance Communications
- 04/12/2013 Perspectives on Modality, CSLI, Stanford University
- 03/05/2013 Mathematical Logic Seminar, Stanford University
- 11/13/2012 Meaning Sciences Club, UC Berkeley

Roles, Rigidity, and Quantification in Epistemic Logic with John Perry

- 06/02/2013 2nd CSLI Workshop on Logic, Rationality and Interaction, CSLI, Stanford University

Comments on “Analyticity and Ontology” by Louis deRosset

- 03/28/2013 2013 Pacific APA, Colloquium: Ontology I

Recent Work in Epistemic Logic

- 03/01/2013 Logic Colloquium, UC Berkeley

Mathematizing Mainstream Epistemology

- 02/22/2013 UC Irvine Logic and Philosophy of Science Colloquium
- 02/07/2013 Carnegie Mellon Philosophy Colloquium

New Pictures of Knowledge and Deduction

- 06/03/2012 1st CSLI Workshop on Logic, Rationality, and Interaction, CSLI, Stanford University

Modal Completeness via Modal Decomposition

- 05/01/2012 Mathematical Logic Seminar, Stanford University

Fallibilism and the Limits of Closure

- 02/06/2012 UT Austin Philosophy Colloquium
- 01/30/2012 UC Berkeley Philosophy Colloquium
- 01/24/2012 Yale University Philosophy Colloquium
- 01/20/2012 University of Pennsylvania Philosophy Colloquium
- 01/13/2012 Stanford University Philosophy Colloquium

Epistemic Closure and Epistemic Logic

- 05/20/2011 Fourth-Year Colloquium, Department of Philosophy, Stanford University
- 11/11/2010 Logic and Interactive Rationality (LIRa) Seminar, University of Groningen

Epistemic Logic and Epistemology

- 05/14/2011 Logic and Methodology Workshop, CSLI, Stanford University

Matter and Consciousness

- 04/23/2012 Invited lecture in Neurobiology 101, Department of Neurobiology, Stanford University
- 04/13/2011 Invited lecture in Neurobiology 101, Department of Neurobiology, Stanford University
- 04/05/2010 Invited lecture in Neurobiology 101, Department of Neurobiology, Stanford University

Open Problems in Public Announcement Logic

- 11/17/2010 Presentation in Introduction to Modal Logic course
Institute for Logic, Language, and Computation (ILLC), University of Amsterdam

Decidability of the PAL Substitution Core

- Presentation of joint work with Tomohiro Hoshi and Thomas Icard

- 08/20/2010 [Workshop on Logic, Rationality, and Intelligent Interaction](#)
European Summer School in Logic, Language, and Information (ESSLLI) 2010
University of Copenhagen
- Moorean Phenomena in Epistemic Logic** with Thomas Icard
- 08/16/2010 [Workshop on Logic, Rationality, and Intelligent Interaction](#)
ESSLLI 2010, University of Copenhagen
- 05/04/2010 [Mathematical Logic Seminar](#), Stanford University
- 04/23/2010 [Stanford - Santa Cruz Modal Logic Meeting](#), CSLI, Stanford University
- [refereed](#)
- Compatibility and accessibility: lattice representations for semantics of non-classical and modal logics**
- 8/23/2022 [Advances in Modal Logic](#), Rennes, France
- Escaping Arrow's Theorem: The Advantage-Standard Model**
- 6/25/2022 [Social Choice and Welfare 2022](#) (online), Mexico City, Mexico
- Measuring Violations of Positive Involvement in Voting**
- 6/26/2021 [Theoretical Aspects of Rationality and Knowledge \(TARK\) 2021](#) (online), Beijing, China
- Inquisitive Intuitionistic Logic**
- 8/25/2020 [Advances in Modal Logic 2020](#) (online)
- Another Problem in Possible World Semantics**
- 8/27/2020 presented by co-author, Yifeng Ding, at [Advances in Modal Logic 2020](#) (online)
- When Do Introspection Axioms Matter for Multi-Agent Epistemic Reasoning?**
- 07/19/2019 presented by co-author, Yifeng Ding, at [Seventeenth conference on Theoretical Aspects of Rationality and Knowledge \(TARK 2019\)](#), University of Toulouse
- One Modal Logic to Rule Them All?**
- 08/27/2018 presented by co-author, Tadeusz Litak, at [Advances in Modal Logic 2018](#), University of Bern
- Indicative Conditionals and Dynamic Epistemic Logic**
- 07/26/2017 presented by co-author, Thomas Icard, at [Sixteenth conference on Theoretical Aspects of Rationality and Knowledge \(TARK 2017\)](#), University of Liverpool
- Beliefs, Propositions, and Definite Descriptions**
- 05/27/2017 presented by co-author, Eric Pacuit, at [Formal Epistemology Workshop \(FEW\) 2017](#), University of Washington
- Powerset Possibilization and Vietoris Possibilization**
- 04/10/2017 presented by co-author, Nick Bezhanishvili, at [ALCOP VIII \(Algebra and Coalgebra meets Proof Theory\)](#), University of Strathclyde
- Preferential Structures for Comparative Probabilistic Reasoning**
- 02/06/2017 [Thirty-First AAAI Conference on Artificial Intelligence \(AAAI 2017\)](#), San Francisco
- Locales, Nuclei, and Dragalin Frames**
- 09/01/2016 presented by co-author, Guram Bezhanishvili, at [Advances in Modal Logic 2016](#), Eötvös University

Partiality and Adjointness in Modal Logic

08/08/2014 [Advances in Modal Logic 2014](#), University of Groningen

Measure Semantics and Qualitative Semantics for Epistemic Modals

05/03/2013 presented with Thomas Icard at the [23rd Semantics and Linguistic Theory \(SALT\) Conference](#) Poster Session, UC Santa Cruz

Epistemic Bandwagons and the Ideal of Independence

08/19/2010 [2nd Copenhagen Conference in Epistemology](#), University of Copenhagen

Epistemic Logic and Relevant Alternatives

08/11/2010 [ESSLLI 2010 Student Session](#), University of Copenhagen

Moorean Phenomena in Epistemic Logic with Thomas Icard

06/26/2010 [Workshop on New Directions in Dynamic Epistemic Logic](#)
North American Summer School in Logic, Language, and Information (NASSLLI) 2010
Indiana University

Dynamic Testimonial Logic

10/10/2009 [Second International Conference on Logic, Rationality, and Interaction \(LORI-II\)](#)
Southwest University, Chongqing, China

Teaching

UC Berkeley

- Summer 2023 PHIL W12A - Introduction to Logic
- Spring 2023 Graduate Seminar: Sources of Nonclassical Logic
- Spring 2023 PHIL 144 - Social Choice Theory
- Summer 2022 PHIL W12A - Introduction to Logic
- Spring 2022 Graduate Seminar: Individual, Social, and Ethical Choice
- Spring 2022 PHIL 12A - Introduction to Logic
- Summer 2021 PHIL W12A - Introduction to Logic
- Spring 2021 Graduate Seminar - Probability
with Paolo Mancosu
- Fall 2020 PHIL 148 - Probability and Induction
- Fall 2020 PHIL 143 - Modal Logic
- Summer 2020 PHIL W12A - Introduction to Logic
- Spring 2020 Graduate Seminar (CS 294-166/PHILOS 290) - Foundations of Beneficial AI
with Stuart Russell (CS), Lara Buchak (Philosophy), and Shachar Kariv (Economics)
- Spring 2020 PHIL H196 - Honors Thesis Seminar
- Fall 2019 Graduate Seminar - Voting and Democracy
- Fall 2019 PHIL 140A - Intermediate Logic
- Summer 2019 PHIL W12A - Introduction to Logic
- Spring 2019 PHIL 12A - Introduction to Logic
- Spring 2019 PHIL 84 - Voting: The Logic of Democracy
- Spring 2019 PHIL 122 - Theory of Knowledge

- Fall 2018 Graduate Seminar - Social Choice Theory for Philosophers and Logicians
- Fall 2018 PHIL 149 - Special Topics in Philosophy of Logic and Mathematics: Nonclassical Logic
- Summer 2018 PHIL W12A - Introduction to Logic
- Spring 2018 PHIL 143 - Modal Logic
- Spring 2018 PHIL 4 - Knowledge and Its Limits
- Spring 2017 PHIL 122 - Theory of Knowledge
- Fall 2016 Graduate Seminar - Intuitionistic Logic and Meaning
- Spring 2015 Phil 143 - Modal Logic
- Spring 2015 Graduate Seminar - Topics in Philosophical Logic
- Spring 2014 PHIL 140A - Intermediate Logic
- Spring 2014 PHIL 4 - Knowledge and Its Limits
- Fall 2013 Graduate Seminar - Modality, Partiality, and Perspective
- Spring 2013 PHIL 4 - Knowledge and Its Limits
- Fall 2012 PHIL 143 - Modal Reasoning
- Fall 2012 Graduate Seminar - Epistemic Logic and Epistemology

Summer Schools

- August 2023 *European Summer School in Logic, Language, and Information* (ESSLLI), Ljubljana
Course on **Possibility Semantics**
- June 2022 *North American Summer School in Logic, Language, and Information* (NASLLI), USC
Course on **Possibility Semantics: Theory and Application**
(<https://sites.google.com/site/wesholiday/NASLLI2022>)
- Aug. 2014 *European Summer School for Logic, Language, and Information* (ESSLLI), Tübingen
Course on **Logic and Probability**
Co-taught with Thomas Icard, Stanford University
- July 2014 *East Asian Summer School in Logic, Language and Computation* (EASLLC), Beijing
Course on **Beyond Worlds and Accessibility**
- Aug. 2013 *European Summer School for Logic, Language, and Information* (ESSLLI), Düsseldorf
Course on **Ten Puzzles and Paradoxes about Knowledge and Belief**
Co-taught with Eric Pacuit, University of Maryland

Stanford University (as instructor)

- Spring 2012 PHIL 150E - Logic in Action, co-taught with Tomohiro Hoshi and Thomas Icard
- Winter 2011 PHIL 23C - Counterfactuals
- Fall 2010 PHIL 239 - Teaching Methods

Service

current at Berkeley

- 10/2014 to present Co-organizer of the **Berkeley-Stanford Circle in Logic and Philosophy**
- 10/2014 to present Administrator of the eScholarship units for **Logic** and **Philosophy** at Berkeley

- 9/2012 to present Co-organizer of the [Working Group in History and Philosophy of Logic, Mathematics, and Science \(HPLMS\)](#)
- 9/2012 to present Computing Committee, Dept. of Philosophy – manager of [email lists](#) and [Logic events](#)
- [past at Berkeley](#)
- 8/2022 to 7/2023 Graduate Advisor of the [Group in Logic and the Methodology of Science](#)
- 8/2018 to 7/2022 Chair of the [Group in Logic and the Methodology of Science](#)
- 8/2019 to 7/2022 Undergraduate Advisor for the Department of [Philosophy](#)
- 10/2020 to 2/2021 FTE Search Committee, Dept. of Philosophy
- 10/2019 to 2/2020 FTE Search Committee, Dept. of Philosophy
- 8/2017 to 7/2018 Graduate Advisor of the [Group in Logic and the Methodology of Science](#)
- 8/2017 to 2/2018 FTE Search Committee, Dept. of Philosophy
- 9/2014 to 2/2015 FTE Search Committee, Dept. of Philosophy
- 7/2014 to 5/2017 Chair of the [Logic Colloquium](#)
- 5/2013 to 5/2015 Liaison between the Director of Undergraduate Studies and undergraduates for the [New Crop Philosophy Prize and Symposium](#), [Phil Forum](#), and [Harvest Moon](#)
- 5/2013 to 5/2015 Junior Assistant for [Berkeley Connect](#), Dept. of Philosophy

refereeing

ongoing referee for *ACM Transactions on Computational Logic*, American Council of Learned Societies Fellowship, *Amsterdam Colloquium 2022*, *Algebra Universalis*, *Analysis*, *Annals of Pure and Applied Logic*, *Applied General Topology*, *Artificial Intelligence*, *Australasian Journal of Philosophy*, *Bulletin of Symbolic Logic*, *Dialectica*, *Economics and Philosophy*, *Episteme*, *Ergo*, *Erkenntnis*, *Ethical Perspectives*, *Fundamenta Informaticae*, *Games*, German Research Foundation, *IEEE Transactions on Artificial Intelligence*, *Indagationes Mathematicae*, *Indian Conference on Logic and its Applications 2013 and 2015*, *International Joint Conference on Automated Reasoning*, *Journal of Logical and Algebraic Methods in Programming*, *Journal of Logic and Computation*, *Journal of Mathematical Logic*, *Journal of Philosophy*, *Journal of Philosophical Logic*, *Journal of Philosophical Research*, *Journal of Symbolic Logic*, *Journal of the Indian Council of Philosophical Research*, *Linguistics and Philosophy*, *Logic in Computer Science 2016*, *Logic Journal of the IGPL*, *Logica Universalis*, *Logical Methods in Computer Science*, *Mathematical Logic Quarterly*, *Mind*, *Minds and Machines*, Netherlands Organization for Scientific Research (NWO), *Notre Dame Journal of Formal Logic*, *Oxford Studies in Epistemology*, Oxford University Press, *Pacific Philosophical Quarterly*, *Public Choice*, Peder Sather Center Grant Proposal Review, *Philosophical Psychology*, *The Philosophical Quarterly*, *The Philosophical Review*, *Philosophical Studies*, Portuguese Foundation for Science and Technology (FCT), *The Review of Symbolic Logic*, *Review of Philosophy and Psychology*, *Semantics and Pragmatics*, *Social Choice and Welfare*, Social Sciences and Humanities Research Council of Canada, *Society for Exact Philosophy*, *Southern Journal of Philosophy*, Springer Mathematics, *Studia Logica*, *Synthese*, *Synthese: Knowledge, Rationality, and Action*, *Theoria: A Swedish Journal of Philosophy*, *THEORIA: An International Journal for Theory, History and Foundations of Science*, *Thought: A Journal of Philosophy*.

editing

- 4/2022 to present Editorial Board Member of *Logics*
- 12/2021 to present Subject Editor for Philosophical Logic, *The Stanford Encyclopedia of Philosophy*
- 1/2020 to present Advisory Board Member of *Logic and Logical Philosophy*
- 12/2015 to present Editorial Board Member of *Trends in Logic*
- 11/2014 to present Editorial Board Member of *The IfCoLog Journal of Logics and their Applications*
- 1/2014 to 12/2019 Editor for *The Review of Symbolic Logic*
- 7/2013 to 4/2014 US Collecting Editor for the *2012 Logic and Interactive Rationality (LIRa) Yearbook*

conference organization

- Spring to Summer 2021 Co-organize with Nick Galatos of the *Special Session on Algebraic Logic*, 2021 ASL North American Annual Meeting (online), Notre Dame, June 22-25, 2021
- Summer 2018 to Spring 2019 PC Chair of the *2019 ASL North American Annual Meeting*, City University of New York, May 20-23, 2019
- Summer 2014 to Fall 2015 PC Co-Chair with Wiebe van der Hoek, *5th International Conference on Logic, Rationality and Interaction (LORI-V)*, October 28-31, 2015

- Fall 2013 to Summer 2014 Co-organizer with Thomas Icard, Workshop on [Epistemic Logic for Individual, Social, and Interactive Epistemology \(ELISIEM\)](#) at ESSLLI 2014, August 11-15, 2014
- Spring 2013 Co-organizer, [2nd CSLI Workshop on Logic, Rationality, and Interaction](#), May 30-June 2, 2013
- Spring 2012 Co-organizer/web designer, [1st CSLI Workshop on Logic, Rationality, and Interaction](#), June 1-3, 2012
- Spring 2011 Co-organizer/web designer, [Workshop on Logic and Methodology](#), CSLI, May 14-15, 2011
- Spring 2009 Co-organizer/web designer, [Berkeley-Stanford-Davis Graduate Conference](#), April 18, 2009

[program committees](#)

- Summer 2023 PC Member for the [Ninth International Workshop on Logic, Rationality, and Interaction \(LORI-IX\)](#), Shandong University, Jinan, China
- Spring 2022 PC member for [ESSLLI 2018 Student Session](#), National University of Ireland, Galway, August 8-19, 2022
- Spring 2022 PC member for [Logic, Algebra and Truth Degrees 2022 \(LATD 2022\)](#), Salerno, Italy, September 4-11, 2022
- Spring 2022 PC member for the [14th Conference on Logic and the Foundations of Game and Decision Theory \(LOFT 2022\)](#), Groningen, The Netherlands, July 20-22
- Spring 2022 PC member for [Formal Epistemology Workshop \(FEW 2022\)](#), UC Irvine, May 27-29, 2022
- Spring 2020 PC member for [Logic, Algebra and Truth Degrees 2020 \(LATD 2020\)](#), Tbilisi, Georgia, September, 13-17, 2021 (postponed one year due to COVID)
- Spring 2020 PC member for [3rd International Conference on Logic and Argumentation \(CLAR 2020\)](#), Hangzhou, China, April 6-9, 2020
- Spring 2020 PC member for [Advances in Modal Logic 2020 \(AiML 2020\)](#), Helsinki, Finland, August 17-21, 2020
- Fall 2019 PC member for the [22nd Amsterdam Colloquium \(AC 2019\)](#), December 18-20, 2019
- Summer 2019 PC member for the [Seventh International Workshop on Logic, Rationality, and Interaction \(LORI-VII\)](#), Chongqing, China, October 18-21, 2019
- Spring 2018 PC member for [Advances in Modal Logic 2018 \(AiML 2018\)](#), Bern, Switzerland, August 27-31, 2018
- Spring 2018 PC member for the [13th Conference on Logic and the Foundations of Game and Decision Theory \(LOFT 2019\)](#), Bocconi University, Milan, Italy, July 16-18, 2018
- Spring 2018 PC member for the [ESSLLI 2018 Student Session](#), Sofia, Bulgaria, August 6-17, 2018
- Fall 2017 PC member for [NASSLLI 2018](#), Carnegie Mellon University, June 25-29, 2018
- Spring 2017 PC member for [Logic at UC Berkeley](#), UC Berkeley, May 5-6, 2018
- Spring 2017 PC member for the [Sixth International Workshop on Logic, Rationality, and Interaction \(LORI-VI\)](#), Sapporo, Japan, September 11-14, 2017
- Spring 2017 PC member for [Topology, Algebra, and Categories in Logic 2017 \(TACL 2017\)](#), Prague, Czech Republic, June 26-30, 2017
- Spring 2017 PC member for the [ESSLLI 2017 Student Session](#), Toulouse, France, July 17-28, 2017
- Spring 2016 to 2017 PC member for the [2017 ASL-APA Meeting](#), Seattle, April 12-15, 2017

- Spring 2016 PC member for the [23rd Workshop on Logic, Language, Information and Computation \(WoLLIC 2016\)](#), Puebla, Mexico, August 16-19, 2016
- Spring 2016 PC member for [ESSLLI 2016 Student Session](#), Bolzano-Bozen, Italy, August 15-26, 2016
- Spring 2016 PC member for the [12th Conference on Logic and the Foundations of Game and Decision Theory \(LOFT 12\)](#), Maastricht, The Netherlands, July 20-22, 2016
- Spring 2015 PC member for the [5th CSLI Workshop on Logic, Rationality, and Interaction](#), Stanford University, May 28-29, 2016
- Fall 2015 PC member for the [15th International Conference on Principles of Knowledge Representation and Reasoning \(KR 2016\)](#), Cape Town, South Africa, April 25-29, 2016
- Fall 2015 PC member for [Amsterdam Colloquium 2015 \(AC 2015\)](#), Amsterdam, The Netherlands, December 16-18, 2015
- Spring 2015 PC member for the [ESSLLI 2015 Student Session](#), Barcelona, Spain, August 3-14, 2015
- Spring 2015 PC member for the [4th CSLI Workshop on Logic, Rationality, and Interaction](#), Stanford University, May 30-31, 2015
- Fall 2013 PC member for the [North American Summer School in Logic, Language and Information \(NASSLLI 2014\)](#), University of Maryland, College Park, June 21-27, 2014
- Spring 2013 PC member for the [Fourth International Workshop on Logic, Rationality, and Interaction \(LORI-IV\)](#), Hangzhou, China, October 9-12, 2013
- Spring 2010 PC member for the [NASSLLI 2010 Student Session](#), Indiana University, June 26, 2010

[previous service](#)

- Winter 2011 Junior Faculty Search Committee member, Department of Philosophy, Stanford University
- AY 2010-2011 Mentor Teaching Assistant, Department of Philosophy, Stanford University
- AY 2010-2011 Philosophy Dept. Liaison to the Center for Teaching and Learning, Stanford University
- AY 2008-2009 Co-President, Hume Society, Stanford's philosophy graduate student association

Professional affiliations

- 11/2022 - [Institute for Mathematics and Democracy](#), Affiliated Faculty
present <https://mathematics-democracy-institute.org>
- 4/2021 - [Center for Human-Compatible Artificial Intelligence](#), Affiliated Faculty
present <https://humancompatible.ai>