

Soroush Rafiee Rad

Dutch Institute for Emergent Phenomena and
Institute for Logic, Language and Computation

soroush.r.rad@gmail.com
www.RafieeRad.org
Tel: +491744765193

Research Interests

Areas of Specialization

Logics for Information Dynamics, Probabilistic Reasoning, Formal Epistemology

Areas of Competence

Social Choice Theory, Probability Theory, non-Classical Logics, Quantum Logic, Decision Theory

Education

Ph.D. in Philosophy

Tilburg Center for Logic and Philosophy of Science (TiLPS) 2014

Thesis: Four Essays on Mathematical Philosophy

Thesis Promoter: Prof. Stephan Hartmann

Thesis committee: Prof. Stephan Hartmann, Prof. Luc Bovens, Prof. Igor Douven, Prof. Rohit Parikh, Prof. Sonja Smets, Prof. Jan Sprenger

Ph.D. in Mathematical Logic

University of Manchester 2009

Thesis: Inference Processes for Probabilistic First Order Languages

Supervisor: Prof. Jeff Paris

Marie Curie Fellowship

B.Sc. in Pure Mathematics

Sharif University of Technology 2004

Appointments

Research fellow, Dutch Institute for Emergent Phenomena and ILLC, Dec 2020-

Replacement for Chair of Logic, Bayreuth University, Oct 2019- Jan 2020

Postdoctoral Researcher, Bayreuth University, Sep 2017-Nov 2020

Research Fellow, Munich Center for Mathematical Philosophy, Feb 2017- Sep 2017

Postdoctoral Researcher, Institute for Logic, Language and Computation, Sep 2014-Feb 2017

Research Fellow, Munich Center for Mathematical Philosophy, Nov 2013-Sep 2014

Research Associate, Tilburg Center for Logic and Philosophy of Science, 2010-2013

Visiting Researcher, Graduate Center, CUNY, May 2013-July 2013

Visiting Researcher, Center for Reasoning, University of Kent, Nov 2012-Feb 2013
Visiting Researcher, CPNSS, LSE, Sep-Nov 2012
Visiting Researcher, Universite Claude Bernard, May 2008-July 2008

Publications

1. Probabilities with Gaps and Gluts (with Klein and Mayer), *J. of Philosophical Logic*, to appear
2. Deliberation, Single-Peakedness, and Coherent Aggregation (with Roy), *American Political Science Review*, to appear
3. Towards Limit Entropy Conjecture (with Landes and Williamson), *Anal. of Pure and Applied Logic*, 172(2), 2021.
4. Probabilistic Characterization of Models of First Order Theories, *Anal. of Pure and Applied Logic*, 172(1), 2021.
5. Learning From Conditionals (with Hartmann & Eva), *Mind*, 129(514): 461--508, 2020.
6. Anchoring in Deliberation (with Hartmann), *Erkenntnis*, 85:1041--1069, 2020.
7. Learning Probabilities: Logic of Statistical Learning (with Baltag and Smets), proceedings of TARK XVII, EPTCS, 297: 35--49, 2019.
8. A Complete Axiomatisation for the Logic of Lattice Effect Algebras (with Sharafi and Smets), *Int. J. Theoretical Physics*, online first, 2019.
9. Maximum Entropy Models of Σ_1 Sentences, *Journal of Applied Logic*, 5(1): 287--300, 2018.
10. Voting, Deliberation and Truth (with Hartmann), *Synthese*, 195:1273--1293, 2018.
11. Categorical Equivalence Between Orthomodular Algebras and Orthomodular Lattices (with Sacks, Kishida and Zhong), *Int. J. Theoretical Physics*, 56(12):3991-4003, 2017.
12. Logical Analysis of Quantum Voting Protocols (with Smets and Shirinkalam), *Int. J. Theoretical Physics*, 56(12): 4060--4072, 2017.
13. Equivocation Axiom for First Order Languages, *Studia Logica*, 105(21), 2017.
14. A Note On The Least Informative Model of A Theory (with Jeff Paris), in *Programs, Proofs, Processes, CiE*, Eds. F. Ferreira, B. Löwe, E. Mayordomo, & L. Mendes Gomes, Springer LNCS 6158, pp. 342-351, 2010.
15. Inference Processes for Quantified Predicate Knowledge (with Jeff Paris), in *Logic, Language, Information and Computation, WoLLIC*, Edinburgh, Eds. W. Hodges and R. de Queiroz, Springer LNAI, 5110, pp. 249-25, 2009.

Work Under Review (drafts available)

1. Probabilistic Entailment on First Order Languages, *Review of Symbolic Logic*, minor revisions submitted
 2. Emergence of Path-Dependence in Deliberation Over Preferences (with Roy), *Social Choice and Welfare*
 3. Logic of Statistical Learning (with Baltag and Smets), *Synthese*
-

Invited Talks

1. From Qualitative Probabilities to Full Belief, SEGA workshop, Bayreuth, Jun 2019
 2. Learning Probabilities, Many Faces of Logic: a Workshop in Honor of Johan van Benthem, Aachen, Nov 2018
 3. Learning Probabilities: The Logic of Statistical Learning, Trends in Logic, Milan, Oct 2018 (Keynote speaker)
 4. From Qualitative Probabilities to Full Belief, Prague, Oct 2018
 5. Logics for Rational Deliberation, Tsinghua University, Beijing, May 2018
 6. Anchoring in Deliberation, SEGA workshop, Paris Oct 2017
 7. Learning Probabilities, Indian Mathematics Consortium, Varanasi, Dec 2016
 8. A Doxastic Dynamic Logic for Learning Probabilities, LogiCIC Workshop, Amsterdam, Nov 2016
 9. Equivalence Between Hilbert Lattices and Quantum Dynamic Algebras, Tbilisi, Jun 2016
 10. Logics of Probabilistic Updates, Workshop on Reasoning in Social Context, Nov 2015
 11. Forming Rational Belief on Quantified Evidence, Tsinghua University, Oct 2015
 12. Maximum Entropy Models and Rational Belief Formation, Rutgers University, Sep 2015
 13. Voting, Deliberation and Truth, LogiCIC workshop, Nov 2014
 14. Learning Conditional Information, Graduate Center, CUNY, Jul 2013
 15. Reasoning From Inconsistent Information, University of Manchester, Nov 2012
 16. Inference Processes for First Order Probabilistic Languages, King College, Nov 2012
 17. Reasoning From Inconsistencies, Choice Group Seminars, LSE, Oct 2012
 18. Learning Causal Conditionals, MCMP Seminars, Venice Nov 2011
 19. Anchoring in Deliberation, Copenhagen-Lund Workshop in Social Epistemology, Copenhagen, Sep 2011
 20. Maximum Entropy and Principles of Rationality, Universite Claude Bernard, Jun 2008
-

Professional Activities

Journal/Conference Reviewing

I have reviewed papers for *Studia Logica*, *Synthese*, *Erkenntnis*, *Review of Symbolic Logic*, *Journal of Philosophical Logic*, *Journal of Symbolic Logic*, *Journal of Applied Logic*, *Journal of Logic and Computation*, the *Logic Journal of IGPL* and *Fundamenta Mathematica*, as well as international workshops including LORI, TARK and WOLLIC. I have also been part of the program committee for several conferences including LORI 2017, LogiCIC 2015, 2016, LORI 2019 and will be part of the program committee of LORI 2021.

∪

Conference/Workshop Organization

I have been involved in the organization of the following conferences, workshops and seminars:

1. Organizer of Bayreuth-LSE student Conference 2019, 2020
2. Main coordinator of weekly LIRa seminars at ILLC, Sep 2014- Feb 2017.
3. Workshop on Logical Structure of Correlated Information Change, ILLC, Nov. 2016

4. Workshop on Reasoning in Social Context, ILLC, Nov. 2015
 5. Workshop on Logical Structure of Correlated Information Change, ILLC, Nov. 2014
 6. Synthese Conference on Qualitative and Quantitative Methods in Formal Epistemology, ILLC, Nov. 2014
 7. Munich-Tilburg-Sydney conference, Tilburg University 2012
 8. Mathlogapp workshop, University of Manchester, 2009
-

Teaching and Supervision

Graduate Supervision

1. Laura Bizhou van Pol, MSc Thesis (co-supervised with Sonja Smets)
Topic: Quantum Theory and Logic of Questions,
ILLC, Defended July 2017.
2. Christian Tueschel, MSc Thesis (co-supervised with Sonja Smets),
Topic: Adoption of IPV6 on Internet Routing Network,
ILLC, Defended October 2017
3. Ko Hung Kuan, MSc Thesis (co-supervised with Sonja Smets)
Title: Coherence Preservation: A Threat to Probabilistic Measures of Coherence
ILLC, Defended August 2015
4. Amirhossein Sharafi (co-supervised with Sonja Smets)
Topic: Effect Algebras and Quantum Logic
Visiting PhD Student, ILLC, Jan 2017- May 2017
5. Elaheh Shirinkalam, (co-supervised with Sonja Smets)
Topic: Verification of Quantum Voting Protocols
Visiting PhD Student, ILLC, Sep 2015- March 2016
6. Andres Occhipinti Liberman, Master of Logic Individual Project
Topic: Principles of Uncertain Reasoning,
ILLC, June-November 2016
7. Melina Mendoza, Master of Logic individual Project,
Topic: Interpretations of Quantum Mechanics
ILLC, March-August 2016
8. Anna Franchini, Master of Logic Individual Project
Topic: Introduction to Category Theory
ILLC, January- July 2016

Undergraduate Supervision

1. Koen Leijnse, BSc Thesis (co-supervised with Dora Achourioti)
Topic: Conditional Statements in Quantum Logic
Amsterdam University College, May 2018.
2. Nicolò Maresca di Serracapriola, BSc Thesis (co-supervised with Dora Achourioti)
Topic: Reassessing the Empirical Status of Logic
Amsterdam University College, May 2018.

Thesis Committee

1. Illiana Gioulatou, MSc Thesis: Yablo's Absoluteness, Fine Truthmaking Semantics and Hyperintentionality, ILLC 2016
2. Benjamin Sparkes, MSc Thesis: Completeness Results for an Inquisitive Doxastic Logic, ILLC 2016
3. Roosmarijn Goldbach, MSc Thesis: Modeling Democratic Deliberation, ILLC 2015

Teaching

1. Logic and Argumentation Theory, Bayreuth 2019
 2. Philosophy of Probability, Bayreuth 2019 (MSc level)
 3. Decision Making and Collective Rationality, Bayreuth 2019
 4. Logic and theory of Argumentation, Bayreuth 2018 (with Olivier Roy)
 5. Epistemic Logic, Bayreuth 2018 (with Marcel Kiel)
 6. Decision Theory and Collective Rationality, Bayreuth 2018
 7. Probabilistic Reasoning, ILLC 2016 (MSc level)
 8. Quantum Logic, ILLC 2016 (MSc level)
 9. Uncertain Reasoning, ILLC 2015 (MSc level)
 10. Introduction to Political Philosophy, MCMP, Munich 2014
 11. Rationality, Tilburg University, 2010, 2011 (with Stephan Hartmann)
 12. Philosophy of Science, Tilburg University, 2011 (with Stephan Hartmann)
 13. Experts in Complex Society, Tilburg University, 2010 (with Stephan Hartmann)
 14. Teaching computer-programming languages, Computing Centre, Sharif University of Technology 2002-2005 (C, C++, JAVA, PHP, SQL)
-