

Valia Allori

Curriculum Vitae

vallori@niu.edu

Department of Philosophy,
Northern Illinois University,
Zulauf Hall 915,
DeKalb IL 60115
Office: 920

Education

- Ph. D., Philosophy, Rutgers University, October 2007 (Defense date May 16, 2007)
Thesis Title: “Fundamental Physical Theories: Mathematical Structures grounded on a Primitive Ontology”.
Committee: Tim Maudlin (supervisor), Frank Arntzenius, Barry Loewer, Sheldon Goldstein, Rutgers University; David Z. Albert, Columbia University
- Ph. D., Physics, University of Genova (Italy), December 2001
Thesis Title: “Decoherence and the Classical Limit of Quantum Mechanics”
Committee: Nino Zanghi (supervisor), University of Genova (Italy); Detlef Dürr, University of Munich (Germany); Lodovico Lanz, University of Milano (Italy)
- Certificate in Scientific Communication, University of Milano (Italy), Fall 1998
- Master, Physics (*Summa cum laude*), University of Milano (Italy), March 1997
Thesis Title: “Interaction of ^{12}C with ^{103}Rh at Energies greater than 33 MeV/nucleon”.
Committee: Ettore Gadioli (supervisor), Claudio Birattari, Roberto Bonetti, University of Milano (Italy)

Area of Specialization

- Philosophy of Physics
- Philosophy of Science
- Metaphysics

Area of Competence

- Logic, Philosophy of Mathematics

Publications: Books

- “La Natura delle Cose: Introduzione ai Fondamenti e alla Filosofia della Fisica”, (transl.: The Nature of Things: Introduction to the Philosophy and the Foundation of Physics) (with M. Dorato, F. Laudisa, N. Zanghi) Carocci eds., Roma (2005)

Publications: Articles

Philosophy

- “On Wave Function Monism in Spontaneous Collapse Theories”. Submitted.
- “Many-Worlds and Schrödinger’s First Quantum Theory”. *The British Journal for the Philosophy of Science*, to appear. (with S. Goldstein, R. Tumulka, and N. Zanghí).
- “On the Classical Limit of Quantum Mechanics”. *Foundations of Physics*, 10.1007/s10701-008-9259-4 (2008). (with N.Zanghí).
- “On the Common Structure of Bohmian Mechanics and the Ghirardi-Rimini-Weber Theory”. *The British Journal for the Philosophy of Science* 59 (3), 353-389 (2008). (with S. Goldstein, R. Tumulka, and N. Zanghí).
- “Ontologie Quantistiche di Particelle, Campi e Lampi” (transl.: “Quantum Ontologies of Particles, Fields and Flashes”). E. Fano and M. Antonelli (eds.), “Strutture dello spazio tra fisica e psicologia”, *Teorie e Modelli XII, III*, 9-29 (2007).(with N. Zanghí).
- “Può la descrizione quanto-meccanica della realtà fisica essere considerata completa?” (transl.: “Can Quantum-Mechanical Description of Physical Reality Be Considered Complete?”) *Il Protagonista* Vol. 9, 163-180 (2007)(with N. Zanghí).
- “What is Bohmian Mechanics”. *International Journal of Theoretical Physics* **43**, 1743-1755 (2004).(with N. Zanghí)
- “Seven Steps Toward the Classical World”. *Journal of Optics B* (4), 482–488 (2002) (with D. Dürr, S. Goldstein, N. Zanghí)

Physics

- “Spectra of Alpha Particles Emitted in the Interaction of ^{12}C with ^{93}Nb ” (with M. Cavinato, *et al.*). *NAC Annual Report* (1998)
- “Angular Distribution and Forward Recoil Range Distributions of the Residue Created in the Interaction of ^{12}C and ^{16}O ions with ^{103}Rh ”. *Nuclear Physics A* 641, 271–296 (1998) (with E. Gadioli, *et al.*).
- “Low Linear Momentum and Energy Transfer Reactions in the Interaction of ^{12}C with ^{103}Rh ”. *Proceedings of the International Conference on Heavy Nucleon Reaction*, Paris (1998).(with E. Gadioli *et al.*)
- “The Interaction of ^{12}C and ^{16}O with ^{103}Rh ”. *Heavy Ion Physics* 7 (1998).(with E. Gadioli, *et al.*)
- “Study of the Interaction of ^{12}C and ^{16}O with ^{103}Rh ”. *NAC Annual Report* (1997).(with E. Gadioli, *et al.*).
- “A Comprehensive Study of the Interaction of ^{12}C with Nuclei”. *Proceedings of the 8th International Conference on Nuclear Reaction Mechanisms*, Varenna, Ricerca ed Educazione Permanente (1997).(with E. Gadioli, *et al.*).
- “Comprehensive Study of the Reaction of ^{12}C with ^{103}Rh up to 33 MeV/nucleon”. *Physics Letters B* 394, 29–36 (1997). (with E. Gadioli, *et al.*).
- “Comprehensive Study of the Interaction of ^{12}C with ^{103}Rh up to 33 MeV/nucleon”. *Proceedings of the International Symposium on Large Scale Collective Motion of Atomic Nuclei*, Brolo, World Scientific, Publ. Co. Ltd, Singapore (1996).(with E. Gadioli, *et al.*).

Publications: Book Reviews

- Book Review of “Quantum Mechanics- a Philosopher’s Overview”, by Salvator Cannavo. International Studies in the Philosophy of Science, to appear.
- Book Review for “Depth-An Account of Scientific Explanation”, by Michael Strevens. Metapsychology Online Reviews <http://metapsychology.mentalhelp.net/>, to appear.
- Book review of “The Kantian legacy in the Nineteenth-Century Science”, M. Friedman, and A. Nordmann (eds.). Journal of the History of Philosophy 47 (3):pp. 478-479 (2009).

Presentations

- Comments on Gregory Landini’s paper “Facts About the Slingshot”. Central State Philosophical Association, Dekalb, IL, October 9-10 2009
- Comments on Chris Pynes’s paper: “The Mistake in Monty Fall”. Illinois Philosophical Association, University of Illinois, Urbana-Champaign, IL, October 23-24 2009.
- “Galileo and the Scientific Method”. Northern Illinois University, CLAS, Department of Physics and Department of History conference on New Ideas in History and Science: Galileo Conference. Dekalb, Illinois, February 6, 2009.
- “On Wave Function Monism is Spontaneous Collapse Theories”. Department of History and Philosophy of Science, Indiana University at Bloomington, January 30, 2009.
- “What does Quantum Mechanics tell us about Time?”. Iowa Philosophical Society 65th Annual Conference, Cornell College, Mount Vernon, Iowa, October 18, 2008 (cancelled).
- Comments on Gregory Landini’s paper “Yablo’s Paradox and Russellian Propositions”. Central States Philosophical Association, St. Paul, Minnesota, September 26-27 2008.
- Comment on Brad Skow’s paper “Why Does Time Pass?”. Ninth Bellingham Summer Philosophy Conference, August 3-7 2008.
- “What Does Quantum Physics Say about Time?”. Philosophy Department, University of Macerata, Macerata (Italy), May 28, 2008.
- Comment on Jeffrey Dunn’s paper “Counterfactual Dependence, Thermodynamics, and the Special Sciences”. 2008 APA Central Division meeting, Chicago, April 17-20, 2008.
- Comment on Cian Dorr’s paper “Quantum Mechanics and Space”. Metaphysics and Physics Conference, Rutgers University, October 26-8, 2007.
- “Primitive Ontology and the Structure of Fundamental Physical Theories”. FQM Foundations of Quantum Mechanics - Quantum Reality: Ontology, Probability, Relativity Conference in honor of Sheldon Goldstein on the occasion of his 60th birthday, Rutgers University, October 7-9, 2007.
- “On the Common Structure of Quantum Theories without Observers”. Philosophy of Physics Colloquium, University of Maryland College Park, March 21, 2007.
- “Pandora’s Cat: On Bohmian Mechanics and GRW theory”. XXXVI Conference of the Italian Society of History of Physics and Astronomy, June 15-17, 2006.
- “On the Importance of the Notion of Primitive Ontology”. Second School on the Foundations of Physical Theories, July 5-9, 2004.
- “Seven Steps toward the Classical World”. Mysteries, Puzzles and Paradoxes in Quantum Mechanics Conference, August 27-September 1, 2001.

- “Decoherence and the Classical Limit of Quantum Mechanics”. IQSA (International Quantum Structures Association) Conference Quantum Structures V, March 31-April 3, 2001.
- “Heavy Ions Reactions at Low Energy”. Centenary of SIF (Italian Society of Physics), June 1997.

Conferences

- “Quantum Mechanics and the Nature of Physical Reality” - Sexten (BZ, Italy), July 22-30, 2009
- “Foundations of Statistical Mechanics” - Rutgers (NJ), May13-14, 2009
- “Philosophy of Gauge Theory” - Center for Philosophy of Science, University of Pittsburgh, Pittsburgh (PA), April 18-19 2009
- “New Directions in the Foundations of Physics” - MAA Carriage House, Washington, DC, May 1-3, 2009
- “New Ideas in History and Science: Galileo Conference” - Dekalb (IL), February 6, 2009
- Philosophy Colloquium, Department of History and Philosophy of Science, Indiana University, Bloomington (IN), January 30, 2008
- Illinois Philosophical Association Meeting - Dekalb (IL), November 7-8, 2008
- Central States Philosophical Association - St. Paul (MN), September 26-27, 2008.
- Ninth Annual Bellingham Summer Philosophy Conference - Bellingham (WA), August 3-7, 2008
- Humanities Colloquium - University of Marecata (Italy), May 28, 2008
- “New Directions in the Foundations of Physics” - American Center for Physics, College Park (MD), April 25-27, 2008
- “The American Philosophical Association Central Division Meeting” - Chicago (IL), April 17-19, 2008
- “Metaphysics Meets Physics on the Banks of the Raritan”- Rutgers (NJ), October 26-28, 2007
- “FQM Foundations of Quantum Mechanics - Quantum Reality: Ontology, Probability, Relativity (A scientific and social meeting to celebrate Shelly Goldstein’s 60th birthday)”- Rutgers (NJ), October 7-9, 2007
- Foundation of Physics Colloquium, University of Maryland College Park (MD), March 17, 2007
- “Philosophy of Physics: Descrying the World in Physics” - CEU SUMMER UNIVERSITY, Budapest (Hungary), July 3- 14, 2006
- XXXVI Conference of the Italian Society of History of Physics and Astronomy - Rome (Italy), June 15-17, 2006
- “New Directions in the Foundations of Physics”- American Institute of Physics, College Park (MD), April 29-May 1, 2005
- “Descrying the world in physics”- Rutgers-Columbia conference in philosophy of science- April 21-23, 2005
- Second School of the Foundations of Physical Theories - University of Urbino (Italy), July 5-9, 2004

- “Quantum Theories without Observers II” - Bielefeld (Germany), February 2-6, 2004 Mysteries, puzzles and paradoxes in Quantum Mechanics IV , Gargnano (Italy), 27 August- 1 September, 2001
- International Quantum Structure Association Fifth Biennial Meeting - Cesena (Italy), March 31-April 5, 2001
- “Chance in Physics, Foundations and Perspectives”- Istituto Italiano per gli Studi Filosofici, Ischia (Italy), November 29, 1999
- VIII Seminario Nazionale di Fisica Teorica - Parma (Italy) August 30 - September 10, 1999
- Centenary of SIF (Italian Physical Society) - Villa Olmo, Como (Italy), June, 1997