# Silvia De Toffoli

Curriculum Vitae

└→ +39 (324) 6688332
☑ silvia.detoffoli@iusspavia.it
ⓒ www.silviadetoffoli.net

Areas of Specialization: Philosophy of Mathematics, Epistemology Areas of Competence: Philosophy of Science, Nietzsche, Philosophy and Literature

## Academic Appointments

- 2022-pres. Scuola Superiore Universitaria IUSS Pavia, Department of Humanities and Life Sciences, Linguistics and Philosophy Center, Assistant Professor of Philosophy
  - 2022 Linköping University, Department of Culture and Society, Assistant Professor of Philosophy and Wallenberg Academy Fellow
- 2019–2022 **Princeton University**, *Philosophy Department*, Postdoctoral Research Associate and Lecturer
- 2013–2014 Montana State University, Department of Mathematical Sciences, Research Scholar and Lecturer

# Academic Affiliations

- 2022-pres. **Technical University of Berlin**, Institute of History and Philosophy of Science, Technology, and Literature, Department Affiliate
- 2022-pres. Sphere Research Unit, CNRS, Paris, Associated Researcher

## Education

2014–2019 Ph.D. in Philosophy, Stanford University

Thesis: *Epistemic Roles of Mathematical Diagrams*, committee: Thomas Ryckman (supervisor), Michael Friedman, Krista Lawlor, Marcus Giaquinto.

Research visits: Columbia University (fall 2016), IHPST – Institute of History and Philosophy of Sciences and Technology, Paris (spring 2017), University of Pennsylvania (fall 2017), Goethe University Frankfurt (spring 2018).

- 2019 Ph.D. Minor in Philosophy, Literature, and the Arts, Stanford University Advisor: R. Lanier Anderson.
- 2016 M.A. in Philosophy, Stanford University
- 2009–2013 **Ph.D in Mathematics**, Technical University of Berlin Thesis: *Degrees of Essentiality for Secants of Knots*, Supervisor: John Sullivan.
- 2006–2009 M.Sc. in Mathematics, *Summa Cum Laude*, University of Bologna As visiting student: University of Paris7, France (2007-2008).

2004–2006 **B.Sc. in Mathematics**, *Summa Cum Laude*, University of Bologna As visiting student: University of Calgary, Canada (2004-2005).

# Publications

#### Articles and Book Chapters

- forth **PROOFS FOR A PRICE: Tomorrow's Ultra-Rigorous Mathematical Culture**, Bulletin of the American Mathematical Society
- forth Who's Afraid of Mathematical Diagrams?, Philosophers' Imprint
- forth **The Epistemological Subject(s) of Mathematics**, *in: The Handbook of the History and Philosophy of Mathematical Practice*, Ed. Bharath Sriraman, Springer
- forth Recalcitrant Disagreement in Mathematics: An "Endless and Depressing Controversy" in the History of Italian Algebraic Geometry, Axiomathes, (with Claudio Fontanari)
- 2022 Objectivity and Rigor in Classical Italian Algebraic Geometry, Noesis, No. 38, 195-212 (with Claudio Fontanari)
- 2022 Intersubjective Propositional Justification, in: Propositional and Doxastic Justification: New Essays on Their Nature and Significance, Eds. Paul Silva Jr. & Luis Oliveira, Routledge, 241-262
- 2022 What Is Mathematical Rigor?, Aphex, No. 25, 1-17 (with John Burgess)
- 2022 What Are Mathematical Diagrams?, Synthese, 200:86, 1-29
- 2021 Groundwork for a Fallibilist Account of Mathematics, The Philosophical Quarterly, Volume 7, Number 4, 823-844
- 2021 Reconciling Rigor and Intuition, Erkenntnis, Volume 86, 1783-1802
- 2019 Leopardi: 'Everything is Evil', in: Evil–A History, Ed. Andrew Chignell, Oxford University Press, 350-357
- 2017 'Chasing' The Diagram The Use of Visualizations in Algebraic Reasoning, The Review of Symbolic Logic, Volume 10, Number 1, 158-186
- 2016 Envisioning Transformations the Practice of Topology, in: Mathematical Cultures, Ed. Brendan Larvor, Birkhäuser, 25-50, (with Valeria Giardino)
- 2015 An Inquiry into the Practice of Proving in Low-Dimensional Topology, in: From Logic to Practice, Eds. Gabriele Lolli, Marco Panza, Giorgio Venturi, Boston Studies in the Philosophy and History of Science, Volume 308, 315-336, (with Valeria Giardino)
- 2014 Forms and Roles of Diagrams in Knot Theory, Erkenntnis, Volume 79, 829-842, (with Valeria Giardino)

Editorial Work

2018 Tools of Reason: The Practice of Scientific Diagramming from Antiquity to the Present, Special issue of Endeavour, with a co-authored introduction, Volume 42 (2-3), 49–59, (with Paula Findlen and Greg Priest)

## Work in Progress

**Philosophy of Mathematical Practice**, entry for the Stanford Encyclopedia for Philosophy, in preparation (with Paolo Mancosu)

**Entries: "Diagrams" and "Fallibilism in Mathematics"**, *The Third Edition of the Blackwell Companion to Epistemology*, Ed. Kurt L. Sylvan, in preparation

How To Prove Things with Diagrams, book proposal submitted Mathematical Justification without (Genuine) Proof, submitted

#### Conference Proceedings

- 2018 Fruitful Over-Determination in Knot Diagrams, Proceeding of Diagrams 2018, Lecture Notes in Computer Science, 10871 LNAI, 807–809
- 2012 Meta-Vermeer: A Topological Reinterpretation of a Masterpiece, Proceeding of Bridges 2012: Mathematics, Music, Art, Architecture, Culture, 499-502, (with Yasuhiro Sakamoto)

#### Outreach

- 2022 Le certezze irraggiungibili della matematica ("The Unreacheable Certainties of Mathematics"), Archimede, La rivista per gli insegnanti e i cultori di matematiche pure e applicate, No. 2, 60-66
- 2022 Conversation with John P. Burgess, Aphex, No. 25
- 2022 I nodi dell'intelligenza artificiale ("The Knots of Artificial Intelligence"), Maddmaths! – Matematica Divulgazione Didattica, 2 gennaio 2022
- 2017 Numeri. Divagazioni, calcoli, giochi ("Numbers. Digressions, calculations, games"), 2<sup>nd</sup> Edition, preface by Furio Honsell, (with Dario De Toffoli and Dario Zaccariotto), Edizioni Koala (1<sup>st</sup> Edition, 2008, Stampa Alternativa, Viterbo, introduction by Stefano Bartezzaghi)

#### Interviews

- 2022 Anche la matematica è un'attività umana intervista a Silvia De Toffoli, Il Tascabile, intervista di Andrea Zanni, Jan. 3, 2022
- 2021 Filosofia pratica della matematica, istruzioni per l'uso intervista a Silvia De Toffoli, Maddmaths! Matematica Divulgazione Didattica, di Roberto Natalini, June 6, 2021

## Grants & Awards

- 2021 Wallenberg Academy Fellowship, Linköping University, Swenden, (> 1 million Euros)
- 2017-2019 Ric Weiland Graduate Fellow in the Humanities & Sciences, Stanford University
  - 2017 France-Stanford Visiting Student Researcher Fellowship, IHPST, Institute of History and Philosophy of Sciences and Technology, Paris
- 2014-2019 PhD scholarship, Stanford University
  - 2013 Certificate of Distinction from the Berlin Mathematical School, for the Ph.D. thesis Degrees of essentiality for secants of knots
- 2009-2013 PhD scholarship, Berlin Mathematical School

## Teaching Experience

#### Scuola Universitaria Superiore IUSS Pavia

- 2022-2023 Philosophy of Mathematics, *HuME PhD Program*, graduate seminar (with Mario Piazza and Andrea Sereni)
- 2022-2023 Social Epistemology, Module of a Master course
- 2022-2023 Visualizzazione, dimostrazioni e rigore: temi di filosofia della pratica matematica, upper division undergraduate class

#### Princeton University

- 2021-2022 Mathematical Rigor Between Theory and Practice, graduate seminar (with John Burgess)
- 2020-2021 Theory of Knowledge, upper division undergraduate class
- 2019-2020 Philosophy of Mathematics, upper division undergraduate class (with John Burgess)

#### Stanford University

- 2017-2018 Philosophy of Mathematics, upper division undergraduate class
- 2016-2017 **Philosophy and Literature**, undergraduate class (TA, Instructors: R. Lanier Anderson and Josh Landy)
- 2015-2016 Epistemology, undergraduate class (TA, Instructor: Eli Alshanetsky)
- 2015-2016 Introduction to Philosophy of Science, undergraduate class (TA, Instructor: Helen Longino)

## Other Universities

- 2016-2017 Introduction to Philosophy, City College New York, undergraduate class
- 2013-2014 Algebraic Topology, Montana State University, graduate seminar
- 2010-2011 **Topology**, *Technical University of Berlin*, Master class (TA, Instructor: John Sullivan)

# **Events** Organization

#### Main Organizer

June 2024	Conference: International Conference of the Association for the Phi-
	losophy of Mathematical Practice (APMP), Conference at IUSS Pavia,
	(with Ludovica Conti, Daniele Molinini, Andrea Sereni, and Luca Zanetti)

- May 2023 Conference: Philosophies of Mathematics in Dialogue, Conference at Princeton University, (with John Burgess)
- 2023-pres. Organizer of the IUSS Philosophy Seminars: Epistemology and Mathematics Series, *IUSS Pavia*, (with Andrea Sereni and Luca Zanetti)
- April 2021 Society Session of the Philosophy of Mathematics Association: Rigor and Intuition, Pacific APA, Online, Portland
- April 2020 [CANCELED] Conference: The 'End' of Philosophy of Mathematics?, Conference at Princeton University, (with John Burgess)
- Aug. 2019 Symposium of the Association for the Philosophy of Mathematical Practice, in: 16<sup>th</sup> Congress of Logic, Methodology and Philosophy of Science and Technology, Prague, (with Andrew Arana)
- Aug. 2018 Symposium of the Association for the Philosophy of Mathematical Practice, in: XXIV World Congress of Philosophy, Beijing
- Feb. 2018 Workshop: Mathematical Reasoning, *Stanford University*, (with Rebecca Morris)
- Oct. 2017 Workshop: Varieties of Visualization in Mathematics, in: 4<sup>th</sup> International Meeting of the Association for the Philosophy of Mathematical Practice, Salvador, Brazil
- Feb. 2017 Conference: Tools of Reason: The Practice of Scientific Diagramming from Antiquity to the Present, Stanford University, (with Paula Findlen and Greg Priest)

#### Member of Scientific or Organizing Committee

- Oct. 2024 **13<sup>th</sup> International Conference on the Theory and Application of Diagrams**, *Münster*, Workshop Chair
- Aug. 2024 XXV World Congress of Philosophy, Rome, Philosophy of Mathematics Program Chair
- Aug. 2023 ECAP11 11th European Congress of Analytic Philosophy, Vienna, Member of the Program Committee
- June 2023 Bounded Rationality, Imperfect Data, and Trust: Perspectives from Social and Formal Epistemology, *IUSS Pavia*, Member of the Organizing Committee
- Sept. 2022 13<sup>th</sup> International Conference on the Theory and Application of Diagrams, *Rome*, Member of the Scientific Committee of the Philosophy Track

- Sept. 2021 **12<sup>th</sup> International Conference on the Theory and Application of Diagrams**, *Online*, Member of the Scientific Committee of the Philosophy Track
- July 2021 6<sup>th</sup> International Conference of the Association for the Philosophy of Mathematical Practice, Online, Chapman University, Member of the Organizing Committee
- Aug. 2020 **11<sup>th</sup> International Conference on the Theory and Application of Diagrams**, *Tallinn*, Member of the Scientific Committee of the Philosophy Track
- Jan. 2020 5<sup>th</sup> International Conference of the Association for the Philosophy of Mathematical Practice, *ETH*, Zurich, Member of the Organizing Committee
- June 2018 **10<sup>th</sup> International Conference on the Theory and Application of Diagrams**, *Edinburgh*, Member of the Scientific Committee of the Philosophy Track

# • Service to the Discipline

- 2023-pres. Member of the Directive Committee, European Society for the Philosophy of Mathematics (ESPM)
- 2023-pres. Representative of researchers, IUSS Pavia
- 2018-pres. Member of the Steering Committee, Association for the Philosophy of Mathematical Practice (APMP)

# Editorial Service

- 2022-pres. Member of the International Advisory Board of *Phenomenology & Mind*
- 2021-pres. Assistant Editor of *APhEx*, (Analytical and Philosophical Explanations) Italian journal for analytic philosophy, *Open Problems* section
- 2019-pres. PhilPapers Editor, Categories: "Mathematical Practice," "Visualization in Mathematics," "Philosophy of Literature," "Fiction," "The Basing Relation," "Propositional and Doxastic Justification," and "Epistemic Fallibilism."

#### Refereeing

#### Journals

Axiomathes, The British Journal for the Philosophy of Science, Episteme, Erkenntnis, European Journal for Philosophy of Science, Dialectica, Journal for General Philosophy of Science, Journal of Humanistic Mathematics, Kriterion, Manuscrito, Philosophia Mathematica, The Philosophical Quarterly, Philosophical Psychology, Philosophical Studies, Philosophical Review, Philosophy of Science, Review of Analytic Philosophy, Spatial Cognition and Computation: An Interdisciplinary Journal, Synthese, Theoria, Topoi.

#### Books

Oxford University Press, Cambridge University Press, Éditions de la Sorbonne.

#### Grants

FWF-Austrian Science Fund, Graduate Women in Science (GWIS) National Fellowship Program, Fondecyt Program National Research and Development Agency (Chile).

## Presentations

(\* = invited at international conference or workshop)

## Coming Up

- Nov. 2023 \*The A Priori in Miami, University of Miami, TBD
- Sept. 2023 **\*33rd Novembertagung: Interactions between the History and Phi**losophy of Mathematics, (keynote) Rijeka, Croatia, TBD
- Sept. 2023 SIFA 2023 15th Conference of the Italian Society for Analytic Philosophy, University of Eastern Piedmont, Alessandria, "Rigor, Intuition, and Diagrams"
- June 2023 Lezioni Enriques, University of Milan, "Che cosa sono i diagrammi matematici?"

#### Past

- June 2023 \*Mathematics Education meets the Philosophy of Mathematical Practice, Loughborough University, "What Mathematical Explanation Cannot Be"
- June 2023 **\*Mathematical Drawings**, *Helsinki University*, "Mathematical Illustrations and Diagrams"
- May 2023 **\*Understanding Mathematical Explanation**, *Rutgers University*, Commentator
- May 2023 Philosophies of Mathematics in Dialogue, Princeton University, "A Fallibilist Account of Mathematical Justification"
- April 2023 **Pacific APA**, Session of the Association for Symbolic Logic, San Francisco, "How to Do Things with Diagrams"
- Dec. 2022 Mercoledì Filosofici del Maino, Pavia, "Mathematical Justification: Motivations for a Fallibilist Account"
- Oct. 2022 Uppsala University, Philosophy Department Talk, "Mathematical Justification: Motivations for a Fallibilist Account"
- Sept. 2022 \*Logic and Philosophy of Mathematics Conference, Scuola Normale Superiore (SNS), Pisa, "Defending Moderate Derivationism"
- Sept. 2022 European Summer School on the Philosophy of Mathematics, University of Konstanz, 5-days tutorial on "Mathematical Knowledge"
- June 2022 EEN (European Epistemology Network) Conference, University of Glasgow, "Successful Transmission of Justification Across Fallacious Arguments"

- June 2022 University of St Andrews, Arché's research stream "Epistemology: Current Themes", "Mathematical Justification"
- May 2022 University of Trento, Maths Bites Trento, Department of Mathematics, "Rigore e Intuizione in Matematica"
- March 2022 CUNY (City University of New York), Graduate Center, Philosophy Colloquium, "Successful Transmission of Justification Across Fallacious Arguments"
- March 2022 Université Paris Cité, SPHERE, History and Philosophy Seminar, Mathematics 19th-21st, "Recalcitrant Disagreement in Mathematics"
- March 2022 Université Côte d'Azur, Nice, Centre de Recherches en Histoire des Idées, Séminaire d'histoire et de philosophie des sciences, "Fallibilisme en mathématiques"
  - Jan. 2022 Eastern APA, Session of the Philosophy of Mathematics Association, Baltimore, Online, "Beliefs, Degrees of Beliefs, and 'Probabilistic Proofs"
  - Dec. 2021 \*Mathematical Collaborations 4, Vrije Universiteit Brussel and University of Leeds, "Higher-Order Evidence in Mathematics"
  - Oct. 2021 **FPMW13-13<sup>th</sup> French PhilMath Workshop**, *Nice*, "Diagrams and the Aprioricity of Mathematics"
- Sept. 2021 SIFA 2021-14<sup>th</sup> Conference of the Italian Society for Analytic Philosophy, Noto, Sicily, "Diagrams and the Aprioricity of Mathematics"
- Sept. 2021 **\*Workshop: Text-Driven Approaches to the Philosophy of Mathematics**, *Duisburg-Essen University, online*, "Algebraic and Graphical Languages: the Case of Monoidal Categories"
- Aug. 2021 **\*Workshop: Topic in Philosophy of Mathematical Practice**, University of Copenhagen, online, "Reconciling Rigor and Intuition"
- July 2021 University of Bologna, Seminar in the mathematics department, "Rigore e Intuizione in Matematica"
- July 2021 6<sup>th</sup> International Conference of the Association for the Philosophy of Mathematical Practice, Chapman University, Online, "Mathematical Practice and Analytic Epistemology"
- June 2021 University of Trento, Seminar for the PopMat Laboratory, "Cosa sono i diagrammi matematici?"
- June 2021 Science & More Talks, Center for Logic, Language and Cognition (LLC), University of Turin, "Can we form a justified belief in mathematics based on an incorrect argument?"
- June 2021 Carl Friedrich von Weizsäcker-Colloquium, University of Tübingen, Online, "What are Mathematical Diagrams?"
- Feb. 2021 Stirling University, Visiting Speaker Seminar, "A Case for the Fundamentality of Doxastic Justification"
- Jan. 2021 \*Workshop: Logic & Philosophy of Mathematics in the Evening, organized by D. Kant and D. Sarikaya, online, "Mathematical Justification"

- Jan. 2021 **Eastern APA**, *online*, Comments on "Nietzsche... and Possibility of Metaphysics"
- Dec. 2020 University of Trento, Online seminar for the PopMat Laboratory, "Philosophy of Mathematical Practice"
- Nov. 2020 Canadian Society for the History and Philosophy of Mathematics, online seminar series, "The Epistemological Subject of Mathematics"
- May 2020 **Texas A&M University**, online talk for a research group on mathematical reasoning, "Who's Afraid of Mathematical Diagrams?"
- April 2020 [Postponed] \*Conference: Understanding Mathematical Explanation, Rutgers University, "Mathematical Explanations in Practice
- April 2020 [Canceled] Conference: The 'End' of Philosophy of Mathematics?,, Princeton University, "Mathematical Justification Ain't What it Seems"
- March 2020 [Canceled] Conference: Dimensions of Epistemic Justification, University of Cologne, commentator at large
  - Jan. 2020 5<sup>th</sup> International Conference of the Association for the Philosophy of Mathematical Practice, *ETH*, Zurich, "A Fallibilist Account of Mathematical Justification"
  - Nov. 2019 Carnegie Mellon University, Philosophy Colloquium, "Diagrammatic Notations in Mathematical Proofs"
  - Nov. 2019 **Rutgers University**, Talk at the Proof Comprehension Research Group, "Mathematical Diagrams"
  - Aug. 2019 16<sup>th</sup> Congress of Logic, Methodology and Philosophy of Science and Technology, *Prague*, "The Epistemic Basing Relation in Mathematics"
  - June 2019 Masterclass in the Philosophy of Mathematical Practice, Vrije Universiteit Brussel, "Mathematical Justification in Practice"
  - June 2019 **\*Conference: Explanatory and Heuristic Power of Mathematics**, University of Roma La Sapienza, "Grasping How a Proof Supports its Conclusion"
  - June 2019 Intersem Seminar Series, Paris 7, organized by Mic Detlefsen, "Rigorous Diagrammatic Proofs"
  - May 2019 **\*Conference: Big Proofs**, International Center for Mathematical Sciences, Edinburgh, "Diagrammatic Notations in Mathematical Proofs"
  - April 2019 Macalester College, Philosophy Colloquium, "Mathematical Justification in Practice"
  - April 2019 **Pacific APA**, Society for Realist-Antirealist Discussion, Vancouver, "Proof, Simil-Proofs, and Mathematical Justification"
  - Dec 2018 Mathematics in Action, Henri Poincaré Archives, Nancy, "Mathematical Justification in Practice"
  - Aug. 2018 XXIV World Congress of Philosophy, *Beijing*, "Fruitful Over-determination for Mathematical Notations"
  - Aug. 2018 XXIV World Congress of Philosophy, Association for Mathematical Practice Session, *Beijing*, "What is a Mathematical Diagram"

- July 2018 **\*Proofs and Representations Workshop**, Munich Center for Mathematical Philosophy, "Heterogenous Notations for Mathematical Proofs"
- June 2018 **10<sup>th</sup> International Conference on the Theory and Application of Diagrams**, *Edinburgh*, "Fruitful Over-Determination in Knot Diagrams"
- March 2018 **Stanford University**, *Psychology Department*, *Jay McClelland Laboratory*, diagrams in Mathematics
  - Feb. 2018 University of British Columbia, Okanagan campus, Philosophy Colloquium, "Diagrams in Mathematical Practice"
  - Jan. 2018 Eastern APA, Society for Realist-Antirealist Discussion, Savannah, "Proofs and Diagrams in Mathematics"
  - Oct. 2017 4<sup>th</sup> International Conference of the Association for the Philosophy of Mathematical Practice, Salvador, Brazil, "Varieties of Mathematical Diagrams"
  - July 2017 **\*Conference: Visual Reasoning and Intuition in Mathematics**, Free University of Berlin, "Knots and Embeddings: New Tools for Incongruent Counterparts"
  - June 2017 **\*Conference: Logic in Question 7**, Sorbonne University, Paris, "Thinking with Diagrams: The Case of Mathematics"
  - June 2017 **PhilMath seminar series**, *IHPST*, *Paris*, "Varieties of Mathematical Diagrams"
  - June 2017 **\*PROOFS workshop**, *IHPST*, *Paris*, "The Notion of Proof in the Practice of Mathematics"
  - April 2017 **\*Workshop: Mathématiques en action**, Archives Henri Poincaré, Nancy, "What is a Mathematical Diagram?"
  - Feb. 2017 **Conference: Tools of Reason**, *Stanford University*, "Thinking with Diagrams: The Case of Mathematics"
  - Nov. 2016 Midwest PhilMath Workshop 17, Notre Dame University, "Thinking with Diagrams: The Case of Mathematics"
- Sept. 2016 City College New York, Philosophy Colloquium, "Aspects of Diagrammatic Reasoning in Mathematics"
- July 2016 Vrije Universiteit Brussel, Philosophy Colloquium, (with Isar Goyvaerts) "Aspects of Diagrammatic Reasoning in Category Theory"
- June 2016 University of Udine, Mathematics and computer science colloquium, "Pensare con i Diagrammi: il caso dei Nodi"
- June 2016 **\*Five Years MCMP: Quo Vadis, Mathematical Philosophy?**, Munich Center for Mathematical Philosophy, ""Varieties of Visualizations in Mathematics"
- April 2016 **\*43<sup>rd</sup> philosophy of science conference in Dubrovnik**, *Dubrovnik*, *Croatia*, "Diagrams in Algebra"
- Nov. 2015 **\*3<sup>rd</sup> International Conference of the Association for the Philosophy of Mathematical Practice**, (keynote) Sorbonne University, Paris, "Chasing' The Diagram – The Use of Visualizations in Algebraic Reasoning"

- March 2015 **Proofs and Pictures Conference**, University of South Carolina, Columbia, "Chasing' The Diagram – The Use of Visualizations in Algebraic Reasoning"
- Feb. 2013 What is? Seminar, Berlin Mathematical School, "What is a Rational Tangle?"
- Sept. 2012 FilMat Conference, Scuola Normale Superiore, Pisa, (with Valeria Giardino) "La dinamica dei diagrammi in teoria dei nodi"
- Sept. 2012 SIFA 2012-Conference of the Italian Society for Analytic Philosophy, Alghero, Italy, (with Valeria Giardino) "Roles and Forms of Diagrams in Knot Theory"
- Sept. 2012 Mathematical Cultures Conference, London, (with Valeria Giardino) "Lowdimensional topology as visual mathematics"
- June 2012 Free University of Berlin, Sybille Krämer's colloquium, "Die epistemische Rollen von Diagrammen in der Topologie"
- May 2012 Conference of the French Society for Analytic Philosoph (SOPHA), École Normale Supérieure, Paris, (with Valeria Giardino) "Diagrammes et Illustrations en Topologie: Le Cas des Nœuds"
- Jan. 2012 Work in Progress Seminar, Munich Center of Mathematical Philosophy, "The Knot Moves: A Case Study on Diagram Dynamics"
- Jan. 2012 University of Sevilla, Philosophy Colloquium, (with Valeria Giardino) "Use and Epistemic Roles of Diagrams in Knot Theory"
- Jan. 2012 Work in Progress Seminar, Munich Center of Mathematical Philosophy, (with Valeria Giardino) "The Knot Moves: A Case Study on Diagram Dynamics"
- Dec. 2009 What is? Seminar, Berlin Mathematical School, "What is a Seifert Surface?"

## Languages

Italian: native.

**English:** excellent (reading, writing, and speaking).

German and French: fluent (reading, writing, and speaking).