

Andrei Rodin

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Areas of Specialisation:

Mathematics in Liberal Arts Education, Greek Mathematics, History and Philosophy of Mathematics and Computer Science, Epistemology of Knowledge Representation and Automated Reasoning.

Areas of Competence:

History and Philosophy of Science, Philosophical and Mathematical Logic, Type theory and Category theory.

Current academic affiliations:

(1) University of Lorraine (Nancy, France), the Archives Henri-Poincaré (research) and the National Higher School of System Engineering and Innovation (Ecole nationale supérieure en génie des systèmes et de l'innovation, ENSGSI, teaching): Temporary Assistant in Education and Research (Attaché temporaire in enseignement et recherche, ATER): temporary research and teaching position from September 2022 to September 2025

(2) Smolny Beyond Borders (SBB): online Liberal Arts international program sponsored by Bard College (USA), see <https://www.smolny.org>, a lecturer (since Fall 2022)

(3) Associated Researcher (chercheur associé étranger) in the laboratory SPHERE (Paris), French National Center for Scientific Research (UMR7219): : permanent secondary non-paid affiliation since 2010

Past affiliations (selection):

September 2012 - June 2022: Associate professor in Saint-Petersburg State University (SPBU, Russia), Smolny College of Liberal Arts and Sciences

February 2012 - June 2022: Senior researcher in Russian Academy of Sciences, Institute of Philosophy (Moscow, Russia)

2007-2011: Postdoctoral Fellow at the Department of History and Philosophy of Science of University Paris-Diderot (Paris, France);

2003-2007: Postdoctoral Fellow at the Philosophy Department of Ecole Normale Supérieure (Paris, France);

Fall 1998 - Spring 1999 : Fulbright Visiting Scholar at the Department of Philosophy of Columbia University (New York City, USA);

Academic studies and qualifications:

2023: Qualification for the function of Professor of University in Epistemology and History of Sciences and Techniques by French Ministry of Higher Education and Research;

2020: Dr. Sc. (Russian equivalent of Habilitation) in Philosophy of Science and Technique; Hab. thesis title: "Axiomatic Architecture of Scientific Theories"; defended in Saint-Petersburg State University 23 December 2020;

1995 : Ph.D. in Philosophy of Science and Technique; Ph.D. thesis title: "First Four Books of Euclid's Elements in the Context of Plato's and Aristotle's Philosophy"; defended in the Institute of Philosophy of Russian Academy of Sciences;

1990 : MA in Mathematics Education. MA thesis title: “A Comparative Analysis of reforms in mathematical education in the USSR, USA and France during the second half of 20th century”; obtained from Moscow Pedagogical Institute.

1982-1985: Bachelor studies of Computer Sciences in the Moscow Institute of Radiotechniques, Electronics, and Automation.

Teaching (selection):

Liberal Arts Mathematics, Science from Historical and Philosophical Perspectives (SBB, undergraduate), *Experimental Design, Data Analysis and Statistics* (ENSGSI, undergraduate) *History of Geometry from Euclid to Grothendieck* (University of Lorraine, master program MADELHIS in the History and Philosophy of science)

Research (selection):

Current collaborations:

- 1) Project *EUCLIDES* co-funded by French ANR and German DFG for the period 2024-2027 and led jointly by Dr. V de Risi (CNRS) and Dr. A. Axworthy (Wuppertal University).
- 2) Project *The Impact of Large Language Models on Mathematical Knowledge and Understanding*, led by Dr. Á.B. Matthíasson (University of Iceland); the project is not funded so far, the research proposal is currently under review.

Funded research projects (last 10 years):

2023-2024 Research grant of the Maison de Sciences de l’Homme de Lorraine (House of Social Sciences and Humanities in Lorraine, France) for the project “Durability of Digital Storages for Archival Purposes” (co-Principal Investigator with Pierre Williams);

2022-2023: Research grant of Russian Scientific Foundation for the project “Epistemology of Digital Knowledge Representation: empirical conjectures, formal proofs and human understanding” (Principal Investigator);

2019-2021: Research grant of Russian Foundation for Fundamental Research for the project “Problem of Knowledge Justification in Formal Epistemology” (Principal Investigator);

2016- 2018: Research grant of Russian Foundation for Fundamental Research for the project “Logical and Epistemological Aspects of Constructive Knowledge” (Principal Investigator);

2013-2015: Research grant of Russian Foundation for Humanities for the project “Axiomatic Method as a Tool of Scientific Inquiry” (Principal Investigator);

2013-2015: Research grant of Russian Foundation for Fundamental Research for the project “Epistemic strategies of applications of mathematics in natural sciences” (Principal Investigator);

2013-2014: Research grant of Saint-Petersburg University for the project “Mathematical and Logical Structures of Knowledge Representation” (Principal Investigator).

Languages: English (fluent), French (fluent), German (reading and basic oral communication), Russian (native), Classic Latin and Greek (basic scholarly reading)

Member of Editorial Board: Logica Universalis (Springer)

Service as invited editor of special issues in academic journals:

(1) Special Issue of *The Mathematics Enthusiast* (University of Montana) on Liberal Arts Mathematics: in preparation;

(2) Special Issue of *BioSystems* (Elsevier) on Foundations of Mathematics and Theoretical Biology: 2021, jointly with Elena Fimmel

(3) Special Issue of *Logica Universalis* (Springer) on Categorical Logic (2013, jointly with Valeria de Paiva)

Membership in Professional Societies:

Member of Board of Directors of Logica Universalis Association (since 2020)