

# GABRIEL TÂRZIU

Curriculum vitae

Munich Center for Mathematical Philosophy  
Ludwig-Maximilians-Universität München  
Fakultät für Philosophie, Wissenschaftstheorie  
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## Areas of Specialization and Competence

- AOS: *General Philosophy of Science, Philosophy of Mathematics, Epistemology*
- AOC: *Metaphysics of Science, Logic, Philosophy of language*

## Education

- 2010: *Ph.D. in philosophy*, Faculty of Philosophy, University of Bucharest (Thesis: “The Fallibility of Mathematics: the status of necessary truths in the context of conceptual revolutions.” Supervisor Prof. Dr. M. Turlea).
- 2005: *MA in philosophy*, Faculty of Philosophy, University of Bucharest (Thesis: “The mind/body relationship: back to common sense?” Supervisor Prof. Dr. M. Dumitru).
- 2004: *BA in philosophy*, Faculty of Philosophy, University of Bucharest (Dissertation: “The realism/antirealism dispute from the perspective of the philosophy of language.” Supervisor Prof. Dr. M. Dumitru)

## Professional Experience

- 2022 - : Marie Skłodowska-Curie Postdoctoral Fellow (Research), LMU, Munich Center for Mathematical Philosophy.
- 2016/01/01 - 2016/04/01: Postdoctoral Researcher (Research), Ghent University, Centre for Logic and Philosophy of Science.
- 2015/01/01 - 2015/02/01: Visiting Researcher (Research), LMU, Munich Center for Mathematical Philosophy.
- 2014/07/01 - 2014/10/01: Visiting Fellow (Research) in the project *A Study in Explanatory Power*. University of Duisburg Essen, Institute of Philosophy.

- 2012/11/01 - 2013/02/01: Visiting Fellow (Research), Vrije Universiteit Brussel, Centrum voor Logica en Wetenschapsfilosofie.
- 2012/06/01 - 2012/08/01: Visiting Fellow (Research), LMU, Munich Center for Mathematical Philosophy.
- 2012/01/01 - 2013/01/01: Postdoctoral Researcher (Research) in the project *Societatea Bazata pe Cunoastere – cercetari, dezbateri, perspective* (POSDRU/89/1.5/S/56815), Romanian Academy, Iasi Branch.

## Publications

### 1. Books

#### As author

- (2022). *Înțelegerea lumii cu ajutorul matematicii* (in Romanian, translation: *Understanding the World with the Help of Mathematics*). Bucharest, Ro: Editura Universității „Alexandru Ioan Cuza”.
- (2013). *Aplicabilitatea Matematicii ca Problema Filosofica* (in Romanian, translation: *The Applicability of Mathematics as a Philosophical Problem*). Iași, Ro: Editura Institutul European.

### 2. Refereed journal articles

- (2022). Can We Have Physical Understanding of Mathematical Facts? *Acta Analytica*, 37(2), 135-158.
- (2021). How Do We Obtain Understanding with the Help of Explanations? *Axiomathes*, 31(2), 173–197.
- (2019). Some Concerns Regarding Explanatory Pluralism: The Explanatory Role of Optimality Models. *Filozofia Nauki*, 28(4), 95-113.
- (2018). Mathematical Explanations and the Piecemeal Approach to Thinking About Explanation. *Logique Et Analyse*, 61(244), 457-487.
- (2018). Importance and Explanatory Relevance: The Case of Mathematical Explanations. *Journal for General Philosophy of Science*, 49(3), 393-412.
- (2018). Can we have mathematical understanding of physical phenomena? *Theoria: An International Journal for Theory, History and Foundations of Science*, 33(1), 91-109.
- (2017). Social Constructivism and Methodology of Science. *Synthesis Philosophica*, 32(2), 449-466.

- (2012). Quantum vs. Classical Logic: The Revisionist Approach. *Logos and Episteme*, 3(4), 579-590.
- (2012). O noua filosofie a matematicii? *Symposion - Journal of Human Sciences*, 20(2), 361-377.

### 3. Contributions in books and proceedings

- (2012). Problems with Devitt's Version of Ontological Scientific Realism. In *Significance and Interpretation within the Knowledge Based Society*, edited by N. Gavrilut and P. Dunca, 120-131. Iași, Ro: Editura Institutul European.
- (2011). Mathematics, Science and Scientific Realism. In *Knowledge and Action within the Knowledge Based Society*, edited by N. Gavrilut and P. Dunca, 73-81. Iași, Ro: Editura Institutul European.
- (2009). Quine's Argument for Mathematical Realism. In *Cuvinte, Teorii si Lucruri: Quine in Perspectiva*, edited by M. Dumitru and C. Stoenescu, 237-254. Giurgiu, Ro: Editura Pelican.

### Presentations

- "Can we have physical understanding of mathematical facts?" Presented at *Explanation and Understanding within Mathematics*, December 5 - 6, 2019, Brussels, Belgium.
- "Can we have mathematical understanding of physical phenomena?" Presented at the *Eighth French Philosophy of Mathematics Workshop (FPMW8 2016)*, November 3-5, 2016, Marseille, France.
- "Mathematical Explanations of Non-Mathematical Facts?" Presented at the *MCMP Colloquium in Mathematical Philosophy* on January the 7<sup>th</sup> 2015, Munich, Germany.
- "Explanation, Understanding and the Role of Mathematics in Science." Presented at *Explanatory Power III: Topics in Explanation, Dependence, and Understanding*, June 5-6, 2014, Essen, Germany.
- "Infinities in Science." Presented at *FotFS VIII: History & Philosophy of Infinity*, September 20-23, 2013, Cambridge, England.
- "Modal Anti-Realism." Presented at *Experience and Explanation in Knowledge Society International Conference*, February 14-17, 2013, Baia Mare, Romania.
- "Scientific Models and Mathematical Understanding." Presented at the *Unity and Diversity in Knowledge Society International Conference*, September 27-30, 2012, Iasi, Romania.

- “Scientific Realism without Mathematical Realism: Escaping the Parasite.” Presented at *SIFA Conference*, September 13-15, 2012, Alghero, Italy.
- “The Role of Aesthetic Considerations in the Development and Appreciation of Mathematical Knowledge.” Presented at the *Bucharest Colloquium in Analytic Philosophy 2012*, June 1-3, 2012, University of Bucharest, Romania.
- “Mathematics and the World.” Presented at the *SOPHA Congress*, May 4-6, 2012, Paris, France.
- “The Influence of Social Factors on Mathematical Practice.” Presented at the International Conference *Rethinking Politics for the Knowledge Society*, December 1-4, 2011, Iasi, Romania.
- “How Far Can Scientific Knowledge Take Us?” Presented at the International Conference *Significance and Interpretation within the Knowledge Based Society*, October 27-30, 2011, Baia Mare, Romania.
- “What can science tell us about mathematical objects.” Presented at *the 14<sup>th</sup> Congress of Logic, Methodology and Philosophy of Science*, July 19-26, 2011, Nancy, France.
- “Pure Versus Applied Mathematics.” Presented at the International *Conference of the Italian Society for Logic and Philosophy of Sciences*, December 15-17, 2010, Bergamo, Italy.
- “Mathematics, Science and Scientific Realism.” Presented at the International Conference *Knowledge and Action*, December 9-12, 2010, Baia Mare, Romania.
- “What can science tell us about mathematical objects.” Presented at the International Conference *The Limits of the Knowledge Society*, October 6-9th 2010, Iasi, Romania.
- “Scientific Realism without Mathematical Realism: Escaping the Parasite” Presented at the *9th National Conference of the Italian Society for Analytic Philosophy. Truth, Knowledge, and Science*, September 23-25, 2010, Padua, Italy.
- “Quine's Way to Realism About Mathematics.” Presented at *"Word and Object" 50 years later: Colloquium in Celebration of W.V.O. Quine*, May 28-29, 2010, Rome, Italy.
- “Quine’s Argument for Mathematical Realism.” Presented at the International Symposium *100 Years from Quine’s Birth. Quine’ Philosophy in Retrospective and Perspective*, November 8-9, 2008, University of Bucharest, Romania.
- “Why Should the Structural Realist be Interested in Solving Wigner’s Problem?” Presented at the *Sixth European Congress of Analytic Philosophy*, August 21-26, 2008, Jagiellonian University, Krakow, Poland.