

# CURRICULUM VITAE

RAONI ARROYO

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## I Personal data

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### I.I Author Identifiers

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- PhilPeople profile: [philpeople.org/profiles/raoni-arroyo](#).
- PhilSci-Archive page: [philsci-archive.pitt.edu/view/creators/Arroyo=3ARaoni\\_Wohnrath=3A=3A.html](#).
- arXiv page: [arxiv.org/a/arroyo\\_r\\_1.html](#)

## 2 Academic Formation

**Graduate (Ph.D.): Philosophy.** Graduate Program in Philosophy. Federal University of Santa Catarina, Brazil. 2016–2020. Thesis title: Discussions on physics, metaphysics and metaphysics: interpreting quantum mechanics. Link: <https://tede.ufsc.br/teses/PFILO381-T.pdf>. Fellowship: Higher Education Personnel Improvement Coordination (Coordenação de Aperfeiçoamento Pessoal de Nível Superior) — CAPES — finance code ooi.

**Graduate (MA): Philosophy.** Graduate Program in Philosophy. State University of Maringá, Brazil. 2013–2015. Dissertation title: The ontological problem of consciousness in quantum mechanics (in Portuguese). Link: <http://repositorio.uem.br:8080/jspui/bitstream/1/2754/1/000220605.pdf>. Fellowship: Higher Education Personnel Improvement Coordination (Coordenação de Aperfeiçoamento Pessoal de Nível Superior) — CAPES — finance code ooi/Araucária Foundation (Fundação Araucária).

**Undergraduate (Lic.): Philosophy** Department of Philosophy. State University of Maringá, Brazil. 2007–2012. Fellowship: Higher Education Personnel Improvement Coordination (Coordenação de Aperfeiçoamento Pessoal de Nível Superior) — CAPES — Institutional Program for Teaching Initiation Scholarships (Programa Institucional de Bolsa de Iniciação à Docência) — PIBID.

### 2.1 Languages

**Portuguese:** native.

**English:** near-native command.

**Italian:** instrumental command.

## 3 Academic Career

**Visiting Scholar:** Department of Philosophy, Communication and Performing Arts. Roma Tre University. Rome, Italy. Contract: May 2023–May 2024. Fellowship: grant #2022/15992-8, São Paulo Research Foundation (FAPESP).

**Postdoctoral Researcher:** Center for Logic, Epistemology and the History of Science. University of Campinas. Campinas, Brazil. Contract: March 2022–March 2025. Fellowship: grant #2021/11381-1, São Paulo Research Foundation (FAPESP).

**Postdoctoral Researcher:** Graduate Program in Philosophy. Federal University of Santa Catarina, Brazil. Contract: August 2021–November 2021.

### 3.1 Areas of Specialization and Competence

Philosophy of Science; Metaphysics; Ontology; Epistemology; Metametaphysics; General and philosophical questions in quantum theory (MSC 81P05).

## 4 Research

### 4.1 Articles

1. **Arroyo, Raoni W.** 2023. Making new tools from the toolbox of metaphysics. *Erkenntnis* 88:2251–2257. <https://doi.org/10.1007/s10670-021-00444-3>.
2. **Arroyo, Raoni W.** and Arenhart, Jonas R. B. 2023. The Powers of Quantum Mechanics: A Metametaphysical Discussion of the ‘Logos Approach’. *Foundations of Science* 28:885–910. <https://doi.org/10.1007/s10699-022-09837-1>.
3. **Arroyo, Raoni W.** and da Silva, Gilson Olegario. 2022. Against ‘Interpretation’: Quantum Mechanics Beyond Syntax and Semantics. *Axiomathes* 32:1243–1279. <https://doi.org/10.1007/s10516-021-09579-y>.
4. **Arroyo, Raoni W.** and Arenhart, Jonas R. B. 2022. The epistemic value of metaphysics. *Synthese* 200 (4). <https://doi.org/10.1007/s11229-022-03833-5>.
5. **Arroyo, Raoni W.** and Arenhart, Jonas R. B. 2022. Whence deep realism for Everettian quantum mechanics? *Foundations of Physics* 52 (6). <https://doi.org/10.1007/s10701-022-00643-o>.

6. Arenhart, Jonas R. B. and **Arroyo, Raoni W.** 2021. On physics, metaphysics, and metametaphysics. *Metaphilosophy* 52 (2): 175–199. <https://doi.org/10.1111/meta.12486>.
7. Arenhart, Jonas R. B. and **Arroyo, Raoni W.** 2021. Back to the question of ontology (and metaphysics). *Manuscrito* 44 (2): 1–51. <https://doi.org/10.1590/0100-6045.2021.V44N2.JR>.
8. Arenhart, Jonas R. B. and **Arroyo, Raoni W.** 2021. The Spectrum of Metametaphysics: Mapping the state of art in scientific metaphysics. *Veritas* 66 (1). <https://doi.org/10.15448/1984-6746.2021.1.41217>.
9. **Arroyo, Raoni W.** 2020. Is Coronavirus an object? Metametaphysics meets medical sciences. *Voluntas* 31 (5): 1–8. <https://doi.org/10.5902/2179378643633>.
10. **Arroyo, Raoni W.** and Nunes Filho, Lauro de Matos. 2018. Underdeterminations of consciousness in quantum mechanics. *Principia* 22 (2): 321–337. <https://doi.org/10.1007/s10808-018-922n2p321>.

## 4.2 Books

1. Arenhart, Jonas R. B. and **Arroyo, Raoni W.**, eds. 2023. *Non-Reflexive Logics, Non-Individuals, and the Philosophy of Quantum Mechanics: Essays in Honour of the Philosophy of Décio Krause*. Synthese Library 467. Springer. <https://doi.org/10.1007/978-3-031-31840-5>.
2. Arenhart, Jonas R. B. and **Arroyo, Raoni W.** Forthcoming (under contract). *Floating Free From Physics: The Metaphysics of Quantum Mechanics*. Synthese Library. Springer.
3. **Arroyo, Raoni W.** and Arenhart, Jonas R. B., eds. Forthcoming (under contract). *Philosophy of Quantum Mechanics Compendium*. Vol. I: Basic Concepts and the Standard Way of Thinking About Them. Coleção CLE.
4. **Arroyo, Raoni W.** and Arenhart, Jonas R. B., eds. Forthcoming (under contract). *Philosophy of Quantum Mechanics Compendium*. Vol. II: Interpretations. Coleção CLE.
5. **Arroyo, Raoni W.** and Arenhart, Jonas R. B., eds. Forthcoming (under contract). *Philosophy of Quantum Mechanics Compendium*. Vol. III: Realism and Antirealism in Quantum Mechanics (and Beyond). Coleção CLE.

### 4.3 Book Chapters

1. Arroyo, Raoni W., Arenhart, Jonas R. B., and Melo, Ederson Safra. Forthcoming. Disentangling scientific realism from anti-exceptionalism. In *Demarcating Logic and Science: Exploring New Frontiers*, edited by Molick, Sanderson. Springer.
2. Arroyo, Raoni W., Arenhart, Jonas R. B., and Krause, Décio. 2023. The elimination of metaphysics through the epistemological analysis: Lessons (un)learned from metaphysical underdetermination. In *Probing the Meaning of Quantum Mechanics: Probability, Metaphysics, Explanation and Measurement*, edited by Aerts, D. et al. London: World Scientific. [https://doi.org/10.1142/9789811283598\\_0011](https://doi.org/10.1142/9789811283598_0011).
3. Arenhart, Jonas R. B. and Arroyo, Raoni W. 2023. The Roads to Non-individuals (And How Not to Read Their Maps). Chap. 5 in *Non-Reflexive Logics, Non-Individuals, and the Philosophy of Quantum Mechanics: Essays in Honour of the Philosophy of Décio Krause*, edited by Arenhart, Jonas R. B. and Arroyo, Raoni W., 79–100. Synthese Library 467. Springer. [https://doi.org/10.1007/978-3-031-31840-5\\_5](https://doi.org/10.1007/978-3-031-31840-5_5).
4. Arroyo, Raoni W. and Arenhart, Jonas R. B. 2019. Between physics and metaphysics: A discussion of the status of mind in quantum mechanics. Chap. 3 in *Quanta and Mind: Essays on the Connection between Quantum Mechanics and Consciousness*, edited by de Barros, José Acácio and Montemayor, Carlos, 31–42. Synthese Library 414. Cham: Springer. [https://doi.org/10.1007/978-3-030-21908-6\\_3](https://doi.org/10.1007/978-3-030-21908-6_3).

### 5 Organizing Committee

1. 13th Principia International Symposium: Workshop on the Philosophy of Quantum Mechanics. Florianópolis, Brazil, 2023.
2. IX International Workshop on Quantum Mechanics and Quantum Information: Quantum Mechanics and the Notion of Theory. Online, 2023. Website: <https://QuantumInternationalNet.com/Workshops>.
3. SPLogIC: São Paulo School of Advanced Science on Contemporary Logic, Rationality, and Information. Campinas, Brazil, 2022. Website: [www.cle.unicamp.br/splogic](http://www.cle.unicamp.br/splogic).
4. VIII International Workshop on Quantum Mechanics and Quantum Information: Quantum Theory and Reality. Online, 2022. Website: <https://QuantumInternationalNet.com/Workshops>.

5. 12th Principia International Symposium: Workshop on the Philosophy of Quantum Mechanics. Online, 2021.
6. VII International Workshop on Quantum Mechanics and Quantum Information: Quantum Ontology and Metaphysics. Online, 2021. Website: <https://QuantumInternationalNet.com/Workshops>.
7. VI International Workshop on Quantum Mechanics and Quantum Information: Identity and Individuality. Florianópolis, Brazil, 2019. Website: <https://QuantumInternationalNet.com/Workshops>.
8. 11th Principia International Symposium: Workshop on the Philosophy of Quantum Mechanics. Florianópolis, Brazil, 2019.

## 6 Presentations

### 6.1 Invited

1. The elimination of metaphysics through the epistemological analysis of underdetermination. *Alophis (Applied Logic, History and Philosophy of Science) Permanent Seminar*, University of Cagliari. Cagliari, Italy.
2. The quantum mechanical question of naturalizing and denaturalizing ontology. With Jonas R. B. Arenhart. *13th Principia International Symposium*. Florianópolis, Brazil, 2023.
3. Quantum theories, quantum interpretations, and quantum ontologies. With Jonas R. B. Arenhart. *IX International Workshop on Quantum Mechanics and Quantum Information: Quantum Mechanics and the Notion of Theory*. Online, 2023.
4. Accepting inconsistent quantum ontologies: the quasi-way. With Otávio Bueno. *2nd Workshop on the Interpretations of Paraconsistent Logics*. Florianópolis, Brazil, 2022.
5. Partial structures, quasi-truth, and structural realism (or: the enemy within). With Otávio Bueno. *CLE Seminar*. Campinas, Brazil, 2022.
6. Wave function empiricism. With Jonas R. B. Arenhart. *VIII International Workshop on Quantum Mechanics and Quantum Information: Quantum mechanics and reality*. Online, 2022.

7. Why be a Dualist? Quantum mechanics and the ‘consciousness causes collapse hypothesis’. With Valdenor Brito Jr. *CLE Permanent Seminar on Metaphysics*. Online, 2022.
8. Whence deep realism for Everettian quantum mechanics? With Jonas R. B. Arenhart. *VII International Workshop on Quantum Mechanics and Quantum Information: Quantum Ontology and Metaphysics*. Online, 2021.
9. On physics, metaphysics and metametaphysics. With Jonas R. B. Arenhart. *IV International Workshop on Quantum Mechanics and Quantum information. Physical, Philosophical and Logical Approaches*. Florianópolis, Brazil, 2017.

## 6.2 Refereed

1. Nomic realism, simplicity, and the simplicity bubble effect. With Felipe S. Abrahão. *Philosophy of Mathematics: Models, Methods, and Applications. Third Graduate Conference of the Italian Network for the Philosophy of Mathematics (FilMat)*. Rome, Italy, 2024.
2. Ontology de-naturalized: what we can’t learn from quantum mechanics. With Jonas R. B. Arenhart. *VII Brazilian Society for Analytic Philosophy Conference*. Rio de Janeiro, Brazil, 2022.
3. Looking back, going forward: towards a ‘da Costa’ school of philosophy. With Itala M. Loffredo D’Ottaviano. *Philosophical Schools After 1950*. Warsaw, Poland, 2022.
4. Lessons (un)learned from metaphysical underdetermination: a methodological appraisal. With Jonas R. B. Arenhart and Décio Krause. *Hi-Phi International Conference*. Lisbon, Portugal, 2022.
5. Realism cannot be a stance: the case of quantum (non-)individuals. With Jonas R. B. Arenhart. *12th Principia International Symposium*. Online, 2021.
6. How not to connect non-individuality and quantum mechanics. With Jonas R. B. Arenhart. *Philosophical Issues of Quantum Mechanics*. Online, 2020.
7. Floating free from physics? The metaphysics of quantum mechanics. With Jonas R. B. Arenhart. *11th Principia International Symposium*. Florianópolis, Brazil, 2019.
8. Underdeterminations of consciousness. With Lauro M. Nunes Filho. *10th Principia International Symposium*. Florianópolis, Brazil, 2017.

## 7 Other academic activities

**Reviewer for academic journals:** Axiomathes, Erkenntnis, European Journal for Philosophy of Science, International Journal of Theoretical Physics, Philosophia, Principia, Synthese, Timing & Time Perception, Theoria.

**Guest Editor for special issue:** Quantum Mechanics and Reality. Theoria, ISSN: 0495-4548.  
With Jonas R. B. Arenhart, Christian de Ronde, and Raimundo Fernández-Mouján.  
Website: <https://ojs.ehu.eus/index.php/THEORIA/announcement/view/261>.