

Pietro Sabelli's Curriculum Vitae

Institute of Philosophy of the Czech Academy of Sciences
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Current Position

2024–2025. Postdoc.
Department of Logic, Institute of Philosophy of the Czech Academy of Sciences, Prague.
Supervisor: Dr. Ansten Klev

Education

2021–2024. Ph.D. in Mathematics.
Department of Mathematics, University of Padua
Supervisors: Prof. Maria Emilia Maietti, Dr. Samuele Maschio
Thesis title: *Around the Minimalist Foundation: (Co)Induction and Equiconsistency*
Defended on December 16, 2024

2018–2020. M.Sc. in Mathematics.
Department of Mathematics, University of Padua
Supervisor: Dr. Samuele Maschio
Thesis title: *Internalizzazione della teoria dei tipi (Internalization of Type Theory)*
Defended on December 11, 2020
Grade: cum laude

2014–2017. B.Sc. in Mathematics.
Department of Mathematics, University of Trento
Supervisor: Prof. Roberto Zunino
Thesis title: *Principio di onniscienza in matematica costruttiva (Principle of omniscience in constructive mathematics)*
Defended on November 20, 2017

Papers in journals

1. A topological reading of inductive and coinductive definitions in Dependent Type Theory. *Mathematical Structures in Computer Science*. To appear.
2. Equiconsistency of the Minimalist Foundation with its classical version. With M.E. Maietti. *Annals of Pure and Applied Logic*, Volume 176, Issue 2, 2025.

Papers in refereed conference proceedings

1. A topological counterpart of well-founded trees in dependent type theory. With M. E. Maietti. *Electronic Notes in Theoretical Informatics and Computer Science*, Volume 3, 2022. Proceedings of MFPS XXXIX.
2. On the Compatibility Between the Minimalist Foundation and Constructive Set Theory. With S. Maschio. *Lecture Notes in Computer Science*, Volume 13359, 2021. *Revolutions and Revelations in Computability*. CiE 2022.

Code

1. Topological (co)induction. Agda. 2024–2025.
Formalization of conference paper 1 and journal paper 1.

Presentations at conferences

1. *A Two-level Foundation for the Calculus of Constructions*
TYPES 2025.
Glasgow, Scotland. 11 June, 2025.
2. *On the conservativity of type theories with classical logic over arithmetic*
EuroProofNet WG6 meeting.
Genova, Italy. April 18, 2025.
3. *Around the Minimalist Foundation: (Co)Induction and Equiconsistency.*
Mini-Workshop on Structures in Foundations of Mathematics.
Padova, Italy. September 23, 2024.
4. *A topological reading of (co)inductive definitions*
XXVIII Incontro di Logica AILA.
Udine, Italy. September 5, 2024.
5. *Peculiarities of the Minimalist Foundation for Formal Mathematics.* With M.E. Maietti.
Trimester program on Prospects of Formal Mathematics.
Bonn, Germany. June 2024.
6. *A topological reading of (co)inductive definitions in Dependent Type Theories*
Workshop on Homotopy Type Theory/Univalent Foundations
Leuven, Belgium. April 4, 2024.
7. *Inductive and Coinductive predicates in the Minimalist Foundation*
Continuity, Computability, Constructivity. From Logic to Algorithms.
Kyoto, Japan. September 26, 2023.
8. *A topological counterpart of well-founded trees in dependent type theory*
Mathematical Foundations of Programming Semantics.
Online. June 23, 2023.
9. *On the relationship between well-founded trees and inductive generation of pointfree topology*
Continuity, Computability, Constructivity. From Logic to Algorithms.
Padova, Italy. September 21, 2022.
10. *On the compatibility between the Minimalist Foundation and Constructive Set Theory*
Computability in Europe: Revolutions and Revelations in Computability.
Swansea, UK. July 12, 2022.

Presentations at local seminars

1. *On the Conservativity of First-order Minimalist Foundation over Arithmetic*
Logic Group at the University of Padova.
Padova. March 25, 2025.
2. *Towards the Categorical Semantics of the Minimalist Foundation*
Department of Logic of the Institute of Philosophy of the Czech Academy of Sciences.
Prague, Czech Republic. January 16, 2025.
3. *Revisiting the equivalence between theories and models of dependent type theory using Curien's explicit syntax*
HoTT Group at CMU.
Pittsburgh, USA. February 10, 2023.

Research visits

University of Padova, Italy.
Host: Prof. Maria Emilia Maietti.
April 7–11, 2025.

Hausdorff Research Institute for Mathematics, Bonn, Germany.
Trimester program on Prospects of Formal Mathematics.
May 19–June 7, 2024.

Carnegie Mellon University, Pittsburgh, USA.
Host: Prof. Steve Awodey.
January 12–March 29, 2023.

Academic memberships

European Research Network on Formal Proofs (EuroProofNet, Working Group 6)

Graduate schools attended

School on Univalent Mathematics
Organized by Scuola Matematica Interuniversitaria (SMI)
Cortona, Italy. July 17-23, 2022.

Midlands Graduate School in the Foundations of Computing Science
Organized by the University of Nottingham
Nottingham, UK. April 10-14, 2022.

Awards

Winner of Premio Tesi 3+2 2021, awarded by AILA (Associazione Italiana di Logica e sue Applicazioni)
to the best M.Sc. thesis in Mathematical Logic.

Conferences organised

5th ItaCa Workshop.
Padova, Italy. December 19-20, 2024.

Mini-Workshop on Structures in Foundations of Mathematics.
Padova, Italy. September 23–26, 2024.

Workshop on Doctrines and Fibrations.
Padova, May 29–June 1, 2023.

Continuity, Computability, Constructivity. From Logic to Algorithms.
Padova, September 19–23, 2022.

Last updated: June 22, 2025