

Andrea Volpi

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Personal information

Date of birth: January 23, 1996

Place of birth: Brescia, Italy

Languages: Italian (native), English (fluent), German (B1)

Research interest

Reverse mathematics; Computability theory; Ramsey theory; Ordinal analysis

Education

Ph.D. student: Mathematics, University of Udine, Italy (supervisor: prof. Alberto Marcone)	from Nov 2022 (expected graduation Mar 2026)
Visiting scholar at UConn, Storrs, Connecticut, US (hosts: prof. Damir Dzhafarov, prof. Reed Solomon)	Jan 2023 to Apr 2023
Visiting scholar at NUS, Singapore (host: dr. Jun Le Goh)	Sep 2025 to Oct 2025
M.Sc.: Mathematics (L40), University of Trento, Italy	Jan 2019 to May 2021
B.Sc.: Mathematics (L35), University of Trento, Italy	Aug 2015 to Nov 2018

Graduate schools

Summer School on Proof Theory	Ghent, Belgium Sep 2025 1 week
Reverse mathematics: new paradigms ESI	Vienna, Austria Jul 2025 to Aug 2025 1 week
IMS graduate summer school in logic	Singapore Jun 2023 to Jul 2023 3 weeks
Computability and combinatorics summer school 2023	Hartford, Connecticut May 2023 1 week
Discrete mathematics and logic: between mathematics and the computer science	Marseille, France Jan 2023 1 week
AILA logic summer school	Gargnano, Italy Aug 2022 1 week

Teaching experience

Teaching assistant, University of Udine, Italy:

- Geometry I, B.Sc. in mathematics, Sep 2024 to May 2025
- Linear algebra, B.Sc. in engineering, Sep 2024 to Dec 2024
- Calculus I, B.Sc. in mathematics, Nov 2023 to Dec 2023
- Calculus I, B.Sc. in informatics, Sep 2023 to Oct 2023
- Calculus I, B.Sc. in informatics and IBML, Jan 2023 to Sep 2023

Teaching assistant, University of Trento, Italy:

- Geometry and linear algebra, B.Sc. in engineering, Sep 2020 to Dec 2020
- Geometry and linear algebra, B.Sc. in engineering, Jan 2020 to May 2020
- Geometry I, B.Sc. in mathematics, Sep 2019 to Dec 2019
- Geometry and linear algebra, B.Sc. in engineering, Jan 2019 to May 2019

Publications and ongoing research

[1] **Effectiveness and strong graph indivisibility**, joint with Damir Dzhafarov and Reed Solomon, <https://arxiv.org/abs/2411.16950> (submitted)

[2] **The barrier Ramsey theorem**, joint with Alberto Marcone and Antonio Montalbán, <https://arxiv.org/abs/2505.02544> (submitted)

[3] **Reverse mathematics and dimension of posets**, joint with Marta Fiori Carones and Alberto Marcone, (work in progress)

[4] **The strength of Ramsey theorem for α -large sets**, joint with Lorenzo Carlucci and Konrad Zdanowski, (work in progress)

[5] **Classification of ultrahomogeneous graphs and posets**, joint with Jun Le Goh, (work in progress)

Conferences attended

Workshop on Proof Theory	Ghent, Belgium	Sep 4-5, 2025
Computability in Europe 2025	Lisbon, Portugal	Jul 14-18, 2025
Reverse mathematics ESI	Vienna, Austria	23 Jun-29 Aug, 2025
Weihrauch Complexity: Structuring the Realm of Non-Computability	Schloss Dagstuhl, Germany	Mar 23-28, 2025
XXVIII AILA logic meeting 2024	Udine, Italy	Sep 3-6, 2024
Models, sets and classifications PRIN meeting 2024	Udine, Italy	Sep 2, 2024
Leeds computability days 2024	Leeds, UK	Jul 2-5, 2024
Logic colloquium 2024	Gothenburg, Sweden	Jun 24-28, 2024
RaTLoCC	Pisa, Italy	Jun 11-14, 2024
Computability and combinatorics conference 2023	Hartford, Connecticut	May 19-21, 2023

Selected talks

Sapienza LOC3 seminar	University La Sapienza, Roma (Invited)	Nov 7, 2025
Presentation title:	Effectiveness and strong graph indivisibility	
Singapore logic seminar	National University of Singapore, Singapore (Invited)	Sep 17, 2025
Presentation title:	Effectiveness and strong graph indivisibility	
Proof society 2025	University of Ghent, Belgium	Sep 4, 2025
Presentation title:	The barrier Ramsey theorem	
<i>Winner of the best student presentation award of Proof Society 2025</i>		
Computability in europe 2025	University of Lisbon, Portugal	Jul 18, 2025
Presentation title:	The strength of Ramsey theorem for α -large sets	
Logic working group	University of Udine, Italy	Feb 21, 2025
Presentation title:	Effectiveness and strong graph indivisibility	
XXVIII AILA logic meeting 2024	University of Udine, Italy	Sep 5, 2024
Presentation title:	Reverse mathematics and dimension of posets	
Models, sets and classifications PRIN meeting	University of Udine, Italy	Sep 2, 2024
Presentation title:	Classifying the pigeonhole property	
Logic colloquium 2024	University of Gothenburg, Sweden	Jun 26, 2024
Presentation title:	Largeness notions	
Logic working group	University of Udine, Italy	Jun 14-21, 2024
Presentation title:	Transfinite Ramsey theorem	
Connecticut logic seminar	UConn, Storrs, Connecticut, US (Invited)	Feb 20, 2024
Presentation title:	Reverse mathematics and dimension of posets	
Computability seminar	CUNY graduate center, New York, US (Invited)	Feb 16, 2024
Presentation title:	Largeness notions	
Logic working group	University of Udine, Italy	May 12, 2023
Presentation title:	Reverse mathematics and dimension of posets	

Organizing activities

World logic day	"Le macchine di Turing"	University of Udine, Italy	Jan 14, 2025
Local organizing committee			
XXVIII AILA logic meeting	University of Udine, Italy	3-6 Sep, 2024	
Local organizing committee			
World logic day	"Contare l'infinito"	University of Udine, Italy	Jan 13, 2023
Local organizing committee			
Logic working group	"Sets and computability in Udine"	University of Udine, Italy	Dec 2022 to Oct 2025
Website management			

Memberships

AILA Associazione italiana di logica e sue applicazioni

UMI Unione matematica italiana

ASL Association for symbolic logic

Awards and grants

Proof Society 2025, Ghent, Belgium: Best student presentation award