

Jacopo Quizi

Curriculum Vitae

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Education

2020–2022

Laurea with honors in Mathematics (master degree)
Università degli Studi di Milano, Milano, Italy
Thesis: Performances of Flexible Modelling Strategies in Survival Analysis: Evaluation by Simulation of a Realistic Two-Peaked Hazard Function

Academic Positions

02-2023–Present

PhD Student in Informatics
Università della Svizzera italiana, Lugano, Switzerland
Faculty of Informatics, Dalle Molle Institute for Artificial Intelligence.
Supervisor: Prof. Michael Multerer

Papers

- [1] H. Harbrecht, M. Multerer, **J. Quizi**. “The dimension weighted fast multipole method for scattered data approximation.” *J. Comput. Phys.* 532, 113956, DOI: <https://doi.org/10.1016/j.jcp.2025.113956>.
- [2] V. Ghidini, M. Multerer, **J. Quizi**, R. Sen. “Observation-specific explanations through scattered data approximation.” *Explainable Artificial Intelligence*, Springer Nature Switzerland, 2024, p. 335–45, DOI: https://doi.org/10.1007/978-3-031-63797-1_17.

Preprints

- [1] G. Giacchi, M. Multerer, **J. Quizi**. “Samplet limits and multiwavelets.” [arXiv:2604.02150](https://arxiv.org/abs/2604.02150)
- [2] G. Elefante, G. Giacchi, M. Multerer, **J. Quizi**. “Bespoke multiresolution analysis of graph signals.” [arXiv:2507.19181](https://arxiv.org/abs/2507.19181)
- [3] D. Fenoglio, P. Polverino, **J. Quizi**, M. Gjoreski, A. Dhasade, M. Langheinrich. “ERIS: Enhancing Privacy and Scalability in Federated Learning via Federated Shard Aggregation.” [arXiv:2602.08617](https://arxiv.org/abs/2602.08617)

Conference Talks

Invited

2026

Young Applied Mathematicians Conference (YAMC)
Turin, Italy - 14–18 September 2026
Talk: “Asymptotic Analysis of Samplets and the Multiwavelet Connection”

Minisymposium: “From Approximation to Structure: Advances in Numerical Methods for PDEs”, organized by Elena Bachini, Ludovico Bruni Bruno and Giacomo Elefante

- 2026** 17th World Congress on Computational Mechanics and 10th European Congress on Computational Methods in Applied Sciences and Engineering (WCCM-ECCOMAS 2026)
Munich, Germany - 19–24 July 2026
Talk: “The dimension weighted fast multipole method for scattered data approximation”
Minisymposium: “Kernel Approximation Methods”, organized by Helmut Harbrecht and Rüdiger Kempf
- 2026** Numerical computations: theory and algorithms (NUMTA2026)
Curinga, Italy - 21–27 June 2026
Talk: “Bespoke multiresolution analysis of graph signals”
Special session: “Theoretical and computational methods for graphs”, organized by Alessandra De Rossi and Iulia Martina Bulai
- 2024** Workshop on Uncertainty Quantification for High-Dimensional Problems
Amsterdam, Netherlands - 11–15 november 2024
Talk: “The dimension weighted fast multipole method for scattered data approximation”
Workshop invitation
- 2024** International Conference on Computational Methods in Applied Mathematics (CMAM-10)
Bonn, Germany - 10–14 June 2024
Talk: “The dimension weighted fast multipole method for scattered data approximation”
Minisymposium: “Computational UQ for PDEs”, organized by Jürgen Dölz and Fernando Henriquez

Contributed

- 2026** Harmonic Analysis and Beyond (Strobl26)
Strobl, Austria - 07–13 June 2026
Talk: “Samplelet limits and multiwavelet analogues”
- 2026** Swiss Numerics Day 2026
Zurich, Switzerland - 10 April 2026
Talk: “Bespoke multiresolution analysis of graph signals”
- 2026** Conference on Modern Kernel Methods and Applications
Hong Kong, Hong Kong - 05–09 January 2026
Talk: “Bespoke multiresolution analysis of graph signals”
- 2025** NumPDE Summer Retreat 2025
Disentis, Switzerland - 09–11 July 2025
Talk: “The dimension weighted fast multipole method for scattered data approximation”
- 2024** XAI-2024
Valletta, Malta - 17–19 July 2024

Talk: “Observation-specific explanations through scattered data approximation”

Poster Sessions

2025 Dolomites Research Week on Approximation and Applications (DRWAA 25)
Alba di Canazei, Italy - 08–12 September 2025
Poster: “Bespoke multiresolution analysis of graph signals”

Academic Services

Conference Organization

2025 Workshop on Multiresolution Methods for Unstructured Data (MUD25)
Lugano, Switzerland - 01–02 October 2025

Other

Referee activity for the journal *Engineering Analysis with Boundary Elements*.

Attended Courses, Schools and Conferences

2025 Workshop: Nonlinear Approximation for High-Dimensional Problems
Sorbonne University, Paris, France - 30 June–04 July 2025

2025 Swiss Numerical Analysis Day 2025
University of Basel, Basel, Switzerland - 03 June 2025

2024 Winter School on Hierarchical Matrices 2024
University of Kiel, Kiel, Germany - 05–09 February 2024

2023 Course: Advanced C++
Swiss National Supercomputing Centre, Lugano, Switzerland - 09–11 October 2023

2023 CIMPA Summer School: Mathematical Modelling and Numerical Simulation in Medicine
University of Havana, Havana, Cuba - 04–17 June 2023

Teaching Experience

Teaching Assistant

2025–2026 Università della Svizzera italiana
Probability and Measure (21 h)

2025–2026 Università della Svizzera italiana
Scattered Data Approximation (10 h)

2024–2025 Università della Svizzera italiana
Stochastic Methods (28 h)

2024–2025	Università della Svizzera italiana <i>Introduction to Ordinary Differential Equations (10 h)</i>
2023–2024	Università della Svizzera italiana <i>Introduction to Computational Science (28 h)</i>
2023–2024	Università della Svizzera italiana <i>Scattered Data Approximation (10 h)</i>
2022–2023	Università della Svizzera italiana <i>Optimization Methods (28 h)</i>