Michelangelo Cavina

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Education

2019–2023 Ph.D., Mathematics, University of Bologna

Thesis Title: Potential theory on metric spaces

Thesis discussion at University of Bologna, department of Mathematics, July 10th, 2023

Supervisor: Nicola Arcozzi

Final grade: Excellent

2015–2019 Master's Degree, Mathematics, University of Bologna

Final grade: 110/110 cum laude

2011–2015 Bachelor's Degree, Mathematics, University of Bologna

Final grade: 108/110

Appointments

2023–2024 Postdoctorial researcher, Mathematics, University of Bologna

Selected Honours and Awards

2011 INdAM University Scholarship

Research visits

Apr–Jul 2022 Research visit at University of Ljubljana (Slovenia) working with Professor Oliver Dragičević.

Publications

Accepted preprints

[1] **Cavina, M**. (2023). A note on a stochastic approach to Caffarelli-Silvestre Theorem. https://arxiv.org/abs/2310.01070

Preprints

[1] **Cavina, M**. (2023). Bellman function for Hardy's inequality over dyadic trees. https://arxiv.org/abs/2002.07532

[2] **Cavina, M**. (2023). On a quasi-additivity formula for the capacity on Ahlfors-regular spaces. https://arxiv.org/abs/2312.08297

Invited talks

[1] **Cavina, M**. (2024). A quasi-additivity formula for the Riesz capacity. III Young Researchers Workshop in Harmonic Analysis. Genoa, Italy.

Contributed talks

[1] **Cavina, M**. (2023). Hardy's inequality over the dyadic tree. XLII Convegno Nazionale di Analisi Armonica. Milan, Italy.

Incoming talks

[1] **Cavina, M**. (2024). The Caffarelli-Silvestre extension technique. XLIII Convegno Nazionale di Analisi Armonica. Vicenza, Italy.

Seminars

[1] **Cavina, M**. (2022). A stochastic view of Caffarelli-Silvestre Theorem. Complex Analysis Lab. Bologna, Italy.

[2] **Cavina, M**. (2020). Stochastic Optimal Control and Bellman function technique V. Complex Analysis Lab. Bologna, Italy.

[3] **Cavina, M**. (2020). Stochastic Optimal Control and Bellman function technique IV. Complex Analysis Lab. Bologna, Italy.

[4] **Cavina, M**. (2019). Stochastic Optimal Control and Bellman function technique III. Complex Analysis Lab. Bologna, Italy.

[5] **Cavina, M**. (2019). Stochastic Optimal Control and Bellman function technique II. Complex Analysis Lab. Bologna, Italy.

[6] **Cavina, M**. (2019). Stochastic Optimal Control and Bellman function technique I. Complex Analysis Lab. Bologna, Italy.