CV

Redi Haderi

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Education

- BA in Mathematics, Boğaziçi University, 2008 - 2012

- MSc in Mathematics, Koç University, 2012 - 2014

- PhD in Mathematics, Bilkent University, 2016 - 2023

Postdoc

Starting from September 2023, I have been a postdoctoral researcher in Bilkent University, working in quantum information theory in a project lead by Cihan Okay.

Research interests

I am interested in the interaction between category theory and algebraic topology. More specifically, I am interested in homotopy coherent categories and operads. I also have an interest in categorical quantum theory.

Writings

- "*A simplicial category for higher correspondences*", 2Appl Categor Struct 31, 4 (2023). https://doi.org/10.1007/s10485-022-09705-w

- "*Colimits of categories, zig-zags and necklaces.*" arXiv preprint arXiv:2309.00337 (2023).

- Haderi, Redi, Cihan Okay, and Walker H. Stern. "*The operadic theory of convexity.*" arXiv preprint arXiv:2403.18102 (2024).

- Haderi, Redi, and Walker H. Stern. "*An $\mathcal{O}$-monoidal Grothendieck construction.*" arXiv preprint arXiv:2404.01031 (2024).

- Haderi, Redi, and Özgün Ünlü. "*Simplicial lists in operad theory I.*" arXiv preprint arXiv:2405.10072 (2024).

- "*Simplicial lists in operad theory II*", in preparation.

Some talks and presentations

- "Simplicial categories as double categories", Topics in Category Theory: Spring School, University of Edinburgh, 2020.

- "Higher equipments and homotopy colimits", Young Topologists Meeting, EPFL, 2019.

- "Enriched lifting and extension problems", Categories and Companions Symposium, Macquire University, 2021.

- "A simplicial category for higher correspondences", Category Theory 2021, University of Genoa.

- "The operadic theory of convexity", 7-th International Conference in Applied Category Theory, 2024, Oxford University.

Courses taught in universities

- Math 1090, Fall 2014, University of Utah, USA

- Analize 2, Spring 2016, Metropolitan University, Albania

- Math 102, Fall 2019, Bilkent University, Turkey

- Math 101, Spring 2020, Bilkent University, Turkey

- Math 105, Fall 2021, Bilkent University, Turkey

- Math 102, Spring 2022, Bilkent University, Turkey

- Math 101, Fall 2022, Bilkent University, Turkey

Awards

- Best talk award in Topics in Category Theory: Spring School, University of Edinburgh, 2020.

- Orhan Alisbah Award in the graduate category, Bilkent University, 2022.

References

- Özgün Ünlü (adviser), Bilkent University, email: unluo@fen.bilkent.edu.tr

- Cihan Okay, Bilkent University, email: cihan.okay@bilkent.edu.tr

- Okan Tekman, Bilkent University, email: otekman@fen.bilkent.edu.tr (teaching reference)