

Miloslav Štěpán

Research interests

2-category theory, 2-dimensional monad theory, lax structures, double categories, universal algebra.

Education

- 2015–2018 **Bc. in mathematics**, *Masaryk University*, Brno
Bachelor thesis "Homogeneous C*-algebras" (in Czech, supervisor Mgr. David Kruml, Ph.D., Faculty of Science, MU)
- 2018–2020 **Mgr. in mathematics**, *Masaryk University*, Brno
Master thesis "2-categories" (in English, supervisor John Bourke, Ph.D., Faculty of Science, MU), graduated with honors
- 2020–Present **Ph.D. in mathematics**, *Masaryk University*, Brno
Dissertation "Lax structures in 2-category theory" (in English, supervisor doc. John Bourke, Ph.D., Faculty of Science, MU)

Teaching experience

- Autumn 2020–2023 **Discrete mathematics**, *Masaryk - Faculty of informatics*
- Spring 2021–2022 **Linear models**, *Masaryk - Faculty of informatics*
- Spring 2023 **Linear algebra and discrete mathematics**, *Masaryk - Faculty of informatics*

Talks

- 2023/10/28 **Octoberfest 2023**
Quasi-limits and lax flexibility
- 2023/10/04 **Algebra seminar**, *Masaryk*, Brno
Quasi-limits and lax flexibility
- 2023/07/06 **CT2023**, Louvain-la-Neuve
Factorization systems as double categories
- 2023/05/18 **Algebra seminar**, *Masaryk*, Brno
Factorization systems and double categories
- 2022/06/09 **Algebra seminar**, *Masaryk*, Brno
On the computation of codescent objects
- 2022/02/02 **Category Theory Seminar**, *Johns Hopkins*, Baltimore, MD
Codescent objects and lax coherence

Preprints

- [1] Miloslav Štěpán. Factorization systems and double categories. *arXiv preprint arXiv:2305.06714*, 2023.