# Davide Castelnovo

Ph. D.

Udine (UD), Italy, 33100 **.** (+39) 3348908828 **∠** castelnovod@gmail.com Citizenship: Italian

#### Education

Nov. 2019 - Jun. **Ph. D.**, *University of Udine*, Italy.

- 2023 (expected) Subjects: Algebraic theories, Categorical models for graph rewriting
  - Supervisor: Prof. Marino Miculan

Jan. 22 - May 28, Visiting student at Tallinn Institute of Technology, Tallinn, Estonia, Collaborat-2022 ing with Dr. Fosco Loregian.

Oct. 2016 - Dec. Master in Mathematics, University of Milano, Italy.

- 2018 Master thesis "A conservative embedding of intuitionistic logic in a topos of sheaves"
  - Supervisors: Prof. S. Mantovani (Univ. of Milano) & Prof. M. E. Maietti (Univ. of Padova).
  - GPA: 110/110 summa cum laude.

Oct. 2012 - Jul. Bachelor in Mathematics, University of Milano, Italy.

- 2016 Bachelor thesis: "Gruppi di omotopia Superiore". Supervisor: Prof. E. Colombo.
  - GPA: 99/110

2007 - 2012 High School, Liceo Scientifico Tecnologico "Antonio Badoni", Lecco (LC), Italy. GPA: 97/100

## Talks and workshops

- 2022 3rd ItaCa Workshop, University of Pisa, Pisa (PI), Italy.
- 2022 **9**<sup>th</sup> **Symposium on Compositional Structures**, *University of Como*, Como (CO), Italy.
- 2022 Talk at 25<sup>th</sup> International Conference on Foundations of Software Science and Computation Structures, "A new criterion for  $\mathcal{M}, \mathcal{N}$ -adhesivity, with an application to hierarchical graphs", Technische Universität München, München, Germany.
- 2022 Talk at 30<sup>th</sup> EACSL Annual Conference on Computer Science in Logic 2022, "Fuzzy Algebraic theories", University of Göttingen, Göttingen (online), Germany.
- 2021 Talk at 22<sup>nd</sup> Graduate Student Conference in Logic "Closure Hyperdoctrines", University of Illinois, Urbana-Champaign (online), United States of America.
- 2021 International Conference on Algebra, Topology and Their Interactions, Udine (online), Italy.
- 2021 Talk at 9th Conference Conference on Algebra and Coalgebra in Computer Science, "Closure Hyperdoctrines", University of Salzburg, Salzburg, Austria.
- 2021 Midlands Graduate School in the Foundations of Computing Science, IMPRS, (online).
- 2020 Talk at TallCat Compositional Systems and Methods group at TalTech, "Equational theories in an enriched context"., Tallinn Institute of Technology, Tallinn (online), Estonia.

- 2020 Talk at 25<sup>th</sup> Estonian Winter School in Computer Science, "Preclosure Hyperdoctrines, Completeness of (Higher Order) Spatial Logic for Closure Spaces", *Tallinn Institute of Technology*, Palmse, Estonia.
- 2019 1st ItaCa Workshop, University of Milano, Milano (MI), Italy.

## Teaching and outreach activities

2020, 2021 Master students tutoring, Tutoring the Algebra 1 course.

(winter term)

2021 Master students tutoring, Tutoring the Linear Algebra course.

(winter term)

## Other Scientific Activity

Sep. 7-8, 2021 Member of the Organizing Committee of the International Conference on Algebra, Topology and Their Interactions, *Udine* (online), Italy.

2020 - 2023 **Students' representative at Mathematics, Computer Science and Physics De**-(expected) **partmental Council**, *Univ. of Udine*, Italy.

2021 - 2023 **Students' representative at Mathematics, Computer Science and Physics PhD** (expected) **School Council**, *University of Udine*, Italy.

#### Technical Skills

Programming HASKELL (basic), C++ (basic)

OS LINUX, WINDOWS

Editing LATEX, OFFICE PACKAGE

## Languages

Italian Mother tongue

English Fluent, speaking and writing

#### List of publications

- Davide Castelnovo, Fabio Gadducci, Marino Miculan, A simple criterion for M, N-adhesivity, 2022, submitted to Theoretical Computer Science;
- Davide Castelnovo, Fabio Gadducci, Marino Miculan, A new criterion for M, N-adhesivity, with an application to hierarchical graphs, 2022, Proceedings of the 25<sup>th</sup> International Conference on Foundations of Software Science and Computation Structures;
- Davide Castelnovo, Marino Miculan, *Fuzzy Algebraic Theories*, Proceedings of the 30th EACSL Annual Conference on Computer Science Logic, 2022;
- Davide Castelnovo, Marino Miculan, Closure Hyperdoctrines, Proceedings of the 9<sup>th</sup> Conference on Algebra and Coalgebra in Computer Science.