# Giacomo Tendas

PERSONAL DETAILS  $E\text{-}mail: \\ \hspace{1.5cm} \text{tendasg@math.muni.cz}$ 

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Google Scholar

 ORCID:
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 City:
 Brno, Czech Republic

Nationality: Italian

Date of birth: 25 November 1993
Place of birth: Oristano (Italy)

Current affiliation: Department of Mathematics, Masaryk University

APPOINTMENTS

2022 - current

## Postdoc - Department of Mathematics, Masaryk University

Project: Enriched categories and their applications. Coordinators: Jiří Rosický and John Bourke.

**EDUCATION** 

2019 - 2022

## Ph.D. in Mathematics, Macquarie University - Australia.

- Title: Topics in the theory of enriched accessible categories.
- Available at: https://doi.org/10.25949/21638081.v1
- Supervisor: A/Prof. Stephen Lack (principal) and Richard Garner (associate).

2018 - 2019

## Master of Research in Mathematics, Macquarie University - Australia.

High Distinction, April 2019.

- Title: Enriched Regular Theories.
- Available at: https://doi.org/10.25949/19443470.v1
- Supervisor: A/Prof. Stephen Lack.

2015/2016 - 2016/2017

#### Master Degree in Mathematics, Università di Pisa - Italy.

110/110 cum laude, 15 December 2017

- Master Dissertation: Strongly Preserved Formulas in Topoi.
- Available at: https://etd.adm.unipi.it/t/etd-11222017-094128/
- Supervisor: Prof. Andreas R. Blass.

2012/2013 - 2014/2015

#### Bachelor Degree in Mathematics, Università di Pisa - Italy.

110/110 cum laude, 16 October 2015

- $\bullet$  Bachelor Dissertation:  $\partial\text{-Ramsey}$  Theorem and a van der Corput Lemma.
- Supervisor: Prof. Mauro Di Nasso.

JOURNAL PUBLICATIONS

[6] Stephen Lack and Giacomo Tendas. Accessible categories with a class of limits. Journal of Pure and Applied Algebra, to appear, 2023. Available at https://arxiv.org/abs/2212.07135.

- [5] Stephen Lack and Giacomo Tendas. Virtual concepts in the theory of accessible categories. *Journal of Pure and Applied Algebra*, Volume 227, Issue 2, February 2023, 107196. Available at https://doi.org/10.1016/j.jpaa.2022.107196.
- [4] Stephen Lack and Giacomo Tendas. Flat vs. filtered colimits in the enriched context. *Advances in Mathematics*, Volume 404, Part A, 6 August 2022, 108381. Available at: https://doi.org/10.1016/j.aim.2022.108381.
- [3] Giacomo Tendas. On continuity of accessible functors. *Applied Categorical Structures*, 10.1007/s10485-022-09677-x, 2022. Available at: https://doi.org/10.1007/s10485-022-09677-x.
- [2] Branko Nikolić, Ross Street, and Giacomo Tendas. Cauchy completeness for DG-categories. *Theory and Applications of Categories*, Volume 37, 2021, No. 28, pp 940-963. Available at: http://www.tac.mta.ca/tac/volumes/37/28/37-28abs.html.
- [1] Stephen Lack and Giacomo Tendas. Enriched regular theories. *Journal of Pure and Applied Algebra*, Volume 224, Issue 6, June 2020, 106268. Available at: https://doi.org/10.1016/j.jpaa.2019.106268.

#### **PREPRINTS**

- ☐ Giacomo Tendas. Flatness, weakly lex colimits, and free exact completions. *submitted for publication*, May 2023, https://arxiv.org/abs/2304.09000.
- □ Jiří Rosický and Giacomo Tendas. Notions of enriched purity. *submitted for publication*, April 2023, https://arxiv.org/abs/2303.11957.
- ☐ Giacomo Tendas. Dualities in the theory of accessible categories. submitted for publication, February 2023, https://arxiv.org/abs/2302.06273.

#### AWARDS

- 2023 Excellent reviews on a EPSRC postdoctoral fellowship on the development of "Enriched Categorical Logic" All reviewers gave an overall assessment of 6/6 with High Confidence Outcome expected in August 2023.
- 2022 Vice-Chancellor's Commendation for Academic Excellence Macquarie University, Australia.
- 2021 Honourable mention for the B. H. Neumann Prize (best student talk) at the 65th Annual Meeting of the Australian Mathematical Society (AustMS2021).
- 2021 Best talk at the Australian Kittens 2021 conference.

## **FUNDING**

- 2019 International Macquarie University Research Excellence Scholarship (iMQRES) Ph.D (3 years).
- 2018 International Macquarie University Research Excellence Scholarship (iMQRES) Master of Research (1 year).

#### INVITED TALKS

• Equivalent characterizations of accessible V-categories - ItaCa Fest 2020 Xmas edition (online), 16 December 2020.

#### SELECTED TALKS

- Dualities in the theory of accessible categories 107th Peripatetic Seminar on Sheaves and Logic (PSSL107), Athens, 1-2 April 2023.
- On continuity of functors between locally presentable categories 65th Annual Meeting of the Australian Mathematical Society (AustMS2021), University of Newcastle and online, 7-10 December 2021.
- Flat vs. filtered colimits International Category Theory Conference (CT20→21), Università di Genova and online, 30 August to 4 September 2021.

• Enriched regular theories - International Category Theory Conference (CT2019), University of Edinburgh, 7-13 July 2019.

#### LOCAL TALKS

Here is a list of talks I gave in the Algebra Seminar at Masaryk University during the first six months of my postdoc:

- Notions of enriched purity 27 April 2023.
- Dualities in the theory of accessible categories 23 February 2023.
- Virtual reflectivity and orthogonality for accessible categories 3 November 2022.
- Flat vs. filtered colimits 13 October 2021.

While here is the list of talks I gave at the Australian Category Seminar during my PhD.

EVENTS ORGANIZED □ Australian Category Seminar - 2022 http://web.science.mq.edu.au/groups/coact/seminar/.

☐ Categories and Companions Symposium - June 8-12, 2021 http://web.science.mq.edu.au/groups/coact/seminar/CaCS2021/.

## REFEREEING ACTIVITIES

I have refereed for the following journals: International Mathematics Research Notices, Mathematical Structures in Computer Science, Theory and Applications of Categories, Applied Categorical Structures, Journal of Mathematics and its Applications.

# TEACHING EXPERIENCE

2022, Session 1 Small Group Teaching Activity - MATH1015 Mathematical Modelling IA (Advanced) and MATH1020 Calculus and Linear Algebra II, Macquarie University.

2021, Session 2 Small Group Teaching Activity - MATH1007 Discrete Mathematics I, Macquarie University.

Session 1 Small Group Teaching Activity - MATH1010 Calculus and Linear Algebra I and MATH1020 Calculus and Linear Algebra II, Macquarie University.

2020, Session 2 Small Group Teaching Activity - MATH1010 Mathematical Modelling IA and MATH1020 Mathematical Modelling IB, Macquarie University.

Session 1 Small Group Teaching Activity - MATH1015 Mathematical Modelling IA (Advanced), Macquarie University.

2019, Session 2 Small Group Teaching Activity - MATH135 Mathematics IA, Macquarie University.

Session 1 Small Group Teaching Activity - MATH135 Mathematics IA, Macquarie University.

# LANGUAGES

Italian: Mother Tongue.

English: Fluent.