

JOÃO LOBO FERNANDES

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EDUCATION

Karlsruhe Institute of Technology, Germany

Since April 2023

Ph.D. in Mathematics

Part of the Research Training Group 2229 "Asymptotic Invariants and Limits of Groups and Spaces" funded by the DFG

Supervised by JProf. Dr. Manuel Krannich (manuel.krannich@kit.edu)

University of Copenhagen, Denmark

September 2020- July 2022

Master of Science (M.Sc.) in Mathematics

Thesis: *Embedding calculus: a study of convergence and finiteness properties of the Goodwillie tower.*

Supervised by Prof. Dr. Soren Galatius (galatius@math.ku.dk)

University of Coimbra, Portugal

September 2017-July 2020

Bachelor of Science (B.Sc.) in Mathematics

Roskilde University, Denmark

September 2018-January 2019

Guest student at Mathematics Department

PREPRINTS

Stable moduli spaces of odd-dimensional manifold triads

Preprint (2025) arXiv: 2510.17986

TEACHING EXPERIENCE

Lecture: Topics in Algebraic Topology

Teaching Assistant - Karlsruhe Institute of Technology - Summer 2025

Lecture: Study Lab in Data Science

Teaching Assistant - IT-University of Copenhagen - Winter 2021

TALKS

Stable moduli spaces of odd-dimensional triads

Contributed talk - Copenhagen - August 2025

Stable moduli spaces of odd-dimensional triads

Contributed talk at YTM 2025 - Stockholm - June 2025

Stable moduli spaces of manifolds

AG Seminar - Karlsruhe - May 2025

Introduction to surgery theory

Junior Geometry Seminar - Cambridge - November 2024

CONFERENCES ATTENDED

Masterclass: Infinity operads and applications to geometry

Copenhagen - August 2025

Finite-Dimensional Algebras: Representations, (Co-)Homology and Stability

Karlsruhe - August 2025

European Talbot Workshop 2025: Chromatic homotopy theory and higher algebra

Kolding - July 2025

Young Topologists Meeting 2025

Stockholm - June 2025

European Talbot Workshop 2024: Algebraic operads and deformation theory

Schleiden - July 2024

Masterclass: Homotopical methods in manifold theory

Copenhagen - April 2024

Spaces of Manifolds: Algebraic and Geometric Approaches

Banff - November 2023

European Autumn School in Topology 2023

Utrecht - September 2023

Workshop on Algebraic K-theory of Spaces

Regensburg - July 2023

Workshop on Homology of Configuration Spaces and related topics

Paris - May 2023

Twinned Conference on Homotopy Theory with Applications to Arithmetic and Geometry

Bonn - June 2022

Masterclass: Homology and Homotopy of Configuration Spaces

Copenhagen - November 2021

Masterclass: High dimensional cohomology of moduli spaces

Copenhagen - July 2021

EXTENDED VISITS

University of Cambridge

Visiting Oscar Randal-Williams - October 2024 - November 2024

SERVICE

Organiser: European Talbot Workshop

Since October 2024

Organiser: Junior Geometry Colloquium

Karlsruhe Institute of Technology - *Since September 2024*

Organiser: Ph.D. seminar in Morse Theory

Karlsruhe Institute of Technology - *March 2024*

AWARDS

Research Scholarship "Novos Talentos em Matemática" - Calouste Gulbenkian Foundation - *October 2019 - July 2020*

Top 3 Percent Student Award

University of Coimbra - *Year 2020*

LANGUAGE SKILLS

- Portuguese (mothertongue)
- English - Level C2
- German - Level B2
- Danish - Level A2 (in 2021)