# THIAGO HOLLEBEN

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#### **EDUCATION**

Universidade Federal do Rio de Janeiro, Brazil

march 2016 - july 2017 (interrupted)

Major in Mathematics

Universidade Federal do Rio de Janeiro, Brazil

july 2017 - 2020

Bachelor in Applied Mathematics

Universidade Federal do Rio de Janeiro, Brazil

august 2019 - december 2021

Master's degree in Mathematics

Dissertation title: The log-concavity of chromatic polynomials.

Advisor: Seyed Hamid Hassanzadeh

Dalhousie University, Canada

september 2022 - current

PhD in Mathematics Advisor: Sara Faridi

## ACADEMIC ACHIEVEMENTS

# Professor Michael Edelstein Memorial Graduate Prize (2023)

Annual prize awarded to a graduate student who shows great promise in the mathematical sciences.

## Honours undergraduate research project (2018)

Received an award for an undergraduate research project on the algebraic and combinatorial properties of Edge Ideals.

Advisor: Seyed Hamid Hassanzadeh

#### **PREPRINTS**

Thiago Holleben. (2023). The weak Lefschetz property and mixed multiplicities of monomial ideals, arxiv link

Susan M. Cooper, Sara Faridi, Lisa Nicklasson, Adam Van Tuyl, Thiago Holleben. (2023). The weak Lefschetz property of whiskered graphs. arxiv link

Sara Faridi, Thiago Holleben. (2023). Homological invariants of ternary graphs. (in preparation: expected September 2023)

#### LEADERSHIP POSITIONS

#### Teaching assistant at Dalhousie

Fall of 2022 and Winter of 2023

### Teaching assistant at UFRJ

First semester of 2019

#### Teaching assistant at UFRJ

First and second semester of 2018

## Organizer of Week of Applied Mathematics and Mathematical Engineering (SEM<sup>2</sup>Ap)

Organized virtual Week of Applied Mathematics and Mathematical Engineering ( $\operatorname{SEM^2Ap}$ ) in 2020

More info on: Webpage, Youtube, Instagram

#### Organizer of weekly student seminar at UFRJ

Organized weekly seminars at UFRJ during the second semester of 2019.

# **EVENTS ATTENDED**

10th Heidelberg Laureate Forum 2023 (poster)

BrianFest (University of Nebraska-Lincoln) 2023 (poster)

34º Colóquio Brasileiro de Matemática (IMPA) 2023 (poster)

Commutative Algebra and its Interaction with Algebraic Geometry (University of Notre Dame) 2023 (poster, lightning talk)

Workshop on Lefschetz Properties in Algebra, Geometry, Topology and Combinatorics. (Fields Institute) 2023 (talk, problem)

Workshop on Commutative Algebra and Algebraic Geometry in Prime Characteristics. (ICTP) 2023 (poster)

School on Commutative Algebra and Algebraic Geometry in Prime Characteristics. (ICTP) 2023 (talk)

Interactions Between Topological Combinatorics and Combinatorial Commutative Algebra (BIRS) 2023 (talk)

Combinatorial Algebra meets Algebraic Combinatorics 2023. (Waterloo University) 2023 (poster)

Combinatorial Algebra meets Algebraic Combinatorics 2020. (Dalhousie University) 2020

1st Joint Meeting Brazil-France in Mathematics. (IMPA) 2019

32º Colóquio Brasileiro de Matemática. (IMPA) 2019

SIMCARA. (USP São Carlos) 2019

Syzygies, from Theory to Applications. (UFPB) 2019

XXV Escola de Álgebra. (UNICAMP) 2018

# **SKILLS**

Programming: Macaulay2, Sage, Python, Javascript, Julia