

Education

- 2024-2027 **Marshall H. Stone Visiting Assistant Professor**, *University of Massachusetts Amherst*, Amherst, MA.
2017-2024 **Graduate Studies**, *University of Texas at Austin*, Austin, TX.
2014 – 2017 **Master Degree in Mathematics**, *Rheinischen Friedrich-Wilhelms Universität Bonn*, Bonn, DE.
2011 – 2014 **Undergraduate Degree in Mathematics**, *Università degli Studi di Trento*, Trento, IT.

Graduate Thesis

- Title *Applications of fixed point Floer theory to 4-dimensional manifold problems.*
Supervisor Prof. Timothy Perutz
Description I provide a formula for counting rigid pseudo-holomorphic sections of a 4-dimensional Lefschetz fibration over the disk.

Master Thesis

- Title *Stable classification of certain families of 4-Manifolds*
Supervisor Prof. Peter Teichner
Description I worked on the stable classification of smooth, oriented 4-manifolds with fundamental group dihedral groups, in some cases providing a full classification of them.

Undergraduate Thesis

- Title *Un'Introduzione alla K-Teoria Topologica Complessa*
Supervisor Prof. Edoardo Ballico
Description An introduction to complex topological K-Theory, from the basic definitions to the Bott Periodicity Theorem and Parallelizability conditions for the spheres.

Research Interests

Symplectic Topology and Geometry, Floer (co)homology, Seiberg-Witten theory, Gauge theory, Algebraic Topology, Bordism, Homotopy theory

Papers and preprints

- In progress **Seidel's exact triangle and sections of 4-dimensional Lefschetz fibrations**, joint with T. Perutz.
2025 **Developing Ethical Reasoning Skills as a Mathematics Student**, joint with J. Austin, M. Cudina and T. Pace, PRIMUS, April, 1 – 15.
2023 **Fixed point Floer cohomology of disjoint Dehn twists on a w^+ -monotone manifold with rational symplectic form**, *Journal of Symplectic Geometry* 2024 vol 22 issue #3.

Selected talks and conferences

- 09/16/2024 **SCGP-Stonybrook. Symplectic Geometry, Gauge Theory, and Low-Dimensional Topology Seminar**, *Towards a count of holomorphic sections of Lefschetz fibrations over the disc*, (Invited speaker) <https://www.math.stonybrook.edu/cal/event.php?ID=6524>.
10/30/2023 **Stanford Symplectic Geometry seminar**, *Towards a count of holomorphic sections of Lefschetz fibrations over the disc*, (Invited speaker) <https://mathematics.stanford.edu/events/symplectic-geometry>.
10/12/2023 **Rutgers Symplectic seminar**, *Towards a count of holomorphic sections of Lefschetz fibrations over the disc*, (Invited speaker) <https://sites.google.com/view/rutgerssymplectic/home>.
9/22/2023 **Columbia Symplectic Geometry and Gauge Theory seminar**, *Towards a count of holomorphic sections of Lefschetz fibrations over the disc*, (Invited speaker) <https://math.columbia.edu/~asplund/srgt>.

- 6/27/2023 **Trisector workshop**, (Contributed talk) <https://sites.google.com/view/tw2023/>.
- 5/27/2023 **GTC2023**, (Contributed talk) <https://topology.franklinresearch.uga.edu/GTC2023>.
- 2/11/2023 **SCTC II**, (Contributed talk) https://www.hiroleetanaka.com/sctc/_SCTC02-index.php.
- 7/7/2022 **GT GAPS**, *Fixed point Floer cohomology of a Dehn twist in a monotone setting and in more general contexts*, (Invited speaker) <https://www.math.toronto.edu/vivianhe/GT-GAPS.html>.
- 5/17/2022 **Freemath seminar**, *Fixed point Floer cohomology of a Dehn twist in a monotone setting and in more general contexts*, (Invited speaker) <https://freemath.xyz>.
- 4/27/2022 **Texas A&M Topology seminar**, *Fixed point Floer cohomology of a Dehn twist in a monotone setting and in more general contexts*, (Invited speaker) <https://www.math.tamu.edu/seminars/topology/index.php>.
- 4/23/2022 **17th Chico Topology Conference**, (Contributed talk) <http://tmattman.yourweb.csuchico.edu/CTC.html>.
- 5/2018 **Summer Mini-course in complex oriented cohomology at the University of Texas at Austin**, (Lectured) I held a four-days long summer course at UT Austin about complex oriented cohomology, generalized orientation and generalized Thom isomorphism. My notes are publicly available on the nLab at <https://ncatlab.org/nlab/show/Riccardo+Pedrotti>.
- 3/16/2017 **Baby Geometri**, *Stable classification of four manifolds*, (Invited speaker) http://people.dm.unipi.it/babygeometri/english/_site/Baby-Geometri2016-2017.pdf.

Awards

- 5/2023 **2022-2023 Frank Gerth III Teaching Excellence Award**.
- 5/2021 **2020-2021 Frank Gerth III Teaching Excellence Award**.
- 5/2018 **2017-2018 Frank Gerth III Graduate Excellence Award**.
- 8/2017 **Provost's Graduate Excellence Fellowship**, Two-year fellowship for graduate studies at the University of Texas, Austin.
- 2/2015 **Premio di Merito 2014**, An award from the University of Trento for outstanding careers.
- 10/2014 **BIGS Qualifying Scholarship**, Two-year scholarship for international students with an excellent Bachelor degree in mathematics.

Language Skill

- Italian **Mother Tongue**
- English **TOEFL iBT: r30; l29; s24; w24**
- German **B1 level**