

## Personal information

Email [vittorio.larotonda@unibo.it](mailto:vittorio.larotonda@unibo.it)  
Webpages [INSPIRE-HEP](#), [UniBo](#)

## Research interests

Non-supersymmetric string theory and quantum gravity, with a focus on anomalies and anomaly inflow, global aspects of gauge symmetries, discrete topological terms, asymmetric orbifolds, generalized symmetries and the Swampland program.

## Research positions & visits

- 2023 - Present **PhD Candidate in Theoretical Physics**  
*Alma Mater Studiorum – Università di Bologna & INFN Bologna*  
Supervisor: Dr. Ling Lin, Co-supervisor: Prof. Michele Cicoli
- February - **Visiting researcher**  
April 2026 *Kavli Institute for the Physics and Mathematics of the Universe, Tokyo*
- February - **Visiting researcher**  
May 2025 *Instituto de Física Teórica UAM/CSIC, Madrid*  
Local supervisor: Miguel Montero

## Education

- 2021 - 2023 **MSc in Theoretical Physics**  
*Università degli studi di Torino*, 110/110 cum laude  
Thesis: "Anomaly inflow in non supersymmetric string theories"  
Supervisors: Prof. Carlo Angelantonj, Dr. Ivano Basile
- 2022 - 2023 **Erasmus+ student in Theoretical Physics**  
*Ludwig-Maximilians-Universität München*
- 2018 - 2021 **BSc in Physics**  
*Università degli Studi di Torino*, 110/110 cum laude  
Thesis: "Derivation of the complete equations of second-order viscous hydrodynamics from kinetic theory"  
Supervisors: Prof. Marco Panero, Dr. Andrea Beraudo
- 2018 - 2023 **Student of Collegio di Merito "R. Einaudi"**  
*Collegio Einaudi, Turin*

## Publications

- 2026 **Non-abelian asymmetric orbifolds with vanishing one-loop vacuum energy**  
B. Fraiman, V. Larotonda, M. Tartaglia  
[arXiv:2607.15349](#)
- 2026 **Non-supersymmetric dualities beyond the gauge algebra**,  
B. Fraiman, V. Larotonda, L. Lin, S. Raucci  
[arXiv:2606.30712](#)
- 2026 **Asymmetric orbifolds with vanishing one-loop vacuum energy**,  
V. Larotonda, M. Montero, M. Tartaglia  
*JHEP* **06** (2026) 142 , [arXiv:2602.07113](#)
- 2025 **Non-supersymmetric branes and discrete topological terms**  
I. Basile, V. Larotonda  
*JHEP* **10** (2025) 030 , [arXiv:2507.11610](#)
- 2025 **Anomaly inflow and gauge group topology in the 10d Sugimoto string theory**  
V. Larotonda, L. Ling  
*JHEP* **06** (2025) 136 , [arXiv:2412.17894](#)

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## Invited Talks & Seminars

- 2026 **Tohoku University**, *Sendai, Japan*, String Theory Seminar  
**RIKEN**, *Tokyo, Japan*, Theory Seminar  
**KEK**, *Tsukuba, Japan*, String Theory Seminar  
**Kyoto University**, *Kyoto, Japan*, String Theory Seminar  
**Tokyo Institute of Science**, *Tokyo, Japan*, String Theory Seminar  
**Kavli IPMU**, *Tokyo, Japan*, String Theory Seminar  
**IPhT**, **Université Paris-Saclay**, *Paris, France*, String Theory Seminar
- 2025 **Max Planck Institute for Physics and LMU**, *Munich, Germany*, Fields & Strings Seminar  
**University of Liverpool**, *Liverpool, UK*, Strings Seminar  
**String-Pheno Seminar**, *Online*, [video]  
**University of Turin**, *Turin, Italy*, Strings & Supergravity Seminar  
**Universidad de Oviedo**, *Oviedo, Spain*, Theory Seminar  
**IFT UAM-CSIC**, *Madrid, Spain*, SPLE Talk  
**University of Milan**, *Milan, Italy*, Regular String Seminar
- 2023 **Max Planck Institute for Physics**, *Munich, Germany*, Lunch Seminar

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## Conference Contributions

- 2026 **IFT Visitor Program**, *Madrid, Spain*, Discussion Session Leader  
**Pro(v/b)ing the Swampland**, *Madrid, Spain*, Poster Session  
**Swamplandia 2026**, *Catania, Italy*, Gong Show Talk  
**Strings and Geometry 2026**, *Uppsala, Sweden*, Poster Session
- 2024 **String Phenomenology**, *Padova, Italy*, Parallel Talk

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## Selected Conferences & Schools

- 2025 **10th IBS/IFT Workshop: Dark World to the Swampland**, *IFT UAM-CSIC, Madrid, Spain*  
**Dark Universe Cosmology**, *University of Bologna, Bologna, Italy*  
**Supergravity 2025**, *Politecnico di Torino, Turin, Italy*
- 2024 **XX Avogadro Meeting on Strings, Supergravity and Gauge Theories**, *Naples, Italy*  
**WISPs in String Cosmology**, *Bologna, Italy*  
**W. E. Heraeus Summer School "Saalburg"**, *Bayrischzell, Germany*  
**Swamplandia – in Bavaria**, *Munich, Germany*  
**Strings & Geometry**, *DESY, Hamburg, Germany*
- 2023 **LACES – Lezioni Avanzate di Campi e Stringhe**, *Galileo Galilei Institute, Florence, Italy*  
**ASC School: The Quantum Gravity Swampland**, *Arnold Sommerfeld Centre, Munich, Germany*
- 2022 **Winter School on Supergravity, Strings and Gauge Theory**, *CERN*

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## Teaching & Supervision

- 2026–Present **Tutor for Calculus II (A–L)**, *Alma Mater Studiorum – Università di Bologna, Bologna, Italy*  
**Tutor for Analytical Mechanics (A–L)**, *Alma Mater Studiorum – Università di Bologna, Bologna, Italy*  
**Tutor for Calculus I (M–Z)**, *Alma Mater Studiorum – Università di Bologna, Bologna, Italy*
- 2025–2026 **Co-Supervisor of a bachelor's thesis**, *Alma Mater Studiorum – Università di Bologna, Bologna, Italy*
- 2024–2025 **Tutor for Calculus II (A–L)**, *Alma Mater Studiorum – Università di Bologna, Bologna, Italy*  
**Tutor for Calculus II (M–Z)**, *Alma Mater Studiorum – Università di Bologna, Bologna, Italy*

## Awards & Scholarships

- 2022 **Start STEM Scholarship**, awarded to support academic excellence in STEM
- 2019 - 2021 **Giovanni Garavelli Study Prize**, awarded for three consecutive years to the most deserving student  
*Collegio di Merito "R. Einaudi"*

## Additional Experience & Outreach

- 2025–2026 **Science Outreach Volunteer, INFN Kids**, *Ninfea Festival, Monticchio, Italy*  
**Boxing Instructor**, *Palestra Popolare Gino Milli, Bologna, Italy*
- 2024 **Junior Trainer, inVISIBILI**, *Università di Bologna*
- 2020–2021 **University Tutor**, *Università degli Studi di Torino, Turin, Italy*
- 2021 **Collaborator, QuiSiRisolve**, *Rome, Italy*

## Languages

- Italian**, Mother tongue
- English**, Professional working proficiency
- Spanish**, B1
- French**, A2