# Daniel Panizo

## Education

- 2019–2024 Doctor of Philosophy, Uppsala University, Uppsala, (Sweden)
- thesis title Blowing Bubbles from String Theory
- supervisors Ulf Danielsson, Tobias Ekholm, Georgios Dimitroglou
- description Embedding of the dark bubble model in string theory and phenomenological consequences
- 2016–2019 Degree of Master of Science (120 ECTS), Uppsala University, Uppsala, (Sweden)
- thesis title Type IIB compactifications and string dualities
- supervisors Giuseppe Dibitetto
- description Compactifications on toroidal orbifolds, non-geometric fluxes and S,T dualities
- 2010–2016 Bachelor in Physics (240 ECTS), Universidad Complutense de Madrid, Madrid, (Spain)

#### Research Positions

2024–2026 Postdoctoral position, Kyoto University, Japan

#### Publications

- [1] D. Panizo Pérez, *Blowing Bubbles from String Theory*, Ph.D. thesis, Uppsala U., Inst. Theor. Phys., 2024.
- [2] U. Danielsson and D. Panizo, Experimental tests of dark bubble cosmology, Phys. Rev. D 109 (2024) 026003 [2311.14589].
- [3] I. Basile, U. Danielsson, S. Giri and D. Panizo, *Shedding light on dark bubble cosmology*, *JHEP* **02** (2024) 112 [2310.15032].
- [4] U. Danielsson, O. Henriksson and D. Panizo, *Stringy realization of a small and positive cosmological constant in dark bubble cosmology*, *Phys. Rev. D* **107** (2023) 026020 [2211.10191].
- [5] U. Danielsson, D. Panizo and R. Tielemans, *Gravitational waves in dark bubble cosmology*, *Phys. Rev. D* **106** (2022) 024002 [2202.00545].
- [6] U.H. Danielsson, D. Panizo, R. Tielemans and T. Van Riet, *Higher-dimensional view on quantum cosmology*, *Phys. Rev. D* **104** (2021) 086015 [2105.03253].

## Awards and Scholarships

- 2024-2026 Kakenhi Grant
  - Grant-in-Aid for JSPS research fellow granted by the Japan Society for the promotion of science, to cover the travel cost of scientific stays in other institutions or conference participation.
- 2024–2026 JSPS Postdoctoral Standard Fellowship
  - Postdoctoral fellowship awarded by the Japan Society for the Promotion of Science (JSPS) to conduct research at Kyoto University, hosted by Professor Takahiro Tanaka.
- 2019–2024 **CIM Scholarship**, *Uppsala University*PhD funding awarded by **CIM** to attend conferences, visit other institutions, as well as acquiring a computer.

#### 2019 Lundström-Åman scholarship, Uppsala University

Project: Compactifications on Calabi-Yau manifolds: A backstage for string cosmology

Master funding awarded by Uppsala University to pay for accomodation expenses while the associated project was conducted.

#### 2018 Erasmus+ scholarship, European Commission

Erasmus funding awarded by Erasmus+ programme to pay for accomodation expenses during my research visit to Arnold Sommerfeld Center (Munich) under Dieter Lüst supervision.

#### Talks

- o (Contributed) Do we live on a Bubble?, contributed talk at JGRG33, Osaka (December 2024)
- o (Contributed) Dark Bubble Cosmology and its Phenomenology, paralel talk at susy24, Madrid (June 2024)
- o (Invited) Experimental tests of dark bubble cosmology, (digital) seminar at IFT, Madrid (Nov 2023)
- (Invited) Our Universe on a (Dark) Bubble, (digital) seminar at CAPT, University of Nottingham (Nov 2023)
- o (Invited) A cosmological excursion to Dark Bubbles, (digital) talk at String Pheno seminars (Nov 2023)
- o (Invited) Our Universe on a (Dark) Bubble, (digital) seminar at Oviedo University Physics Department (Nov 2023)
- o (Invited) Dark bubble cosmology, (digital) seminar at Kyoto University (Jul 2023)
- o (Invited) Blowing bubbles from string theory, seminar at Helsinki Institute of Physics (Dec 2022)
- o (Contributed) Dark bubbles and their string embedding, talk at the  $31^{st}$  Nordic Network meeting on "Strings, Fields and Branes" in Copenhague (Nov 2022)
- o (Contributed) Riding bubbles to take off from the swamp, talk at String phenomenology conference (Jul 2022)

## Teaching experience

2020–2024 **Teacher Assistant**, Classical Electrodynamics (10 ECTS)

2022–2023 **Teacher Assistant**, Gravitation and Cosmology (10 ECTS)

2022–2023 Lab Assistant, Mecanic III (10 ECTS)

### Computer skills

Mathematica

Latex

Python

html

## Languages

Spanish Native

English C1

Swedish B2

Japanese N5

French A2

Other language Willing to learn

## Referees

- o Ulf Danielsson, Professor at Uppsala University (Sweden)
- O Thomas Van Riet, Associate Professor at KU Leuven (Belgium)