# 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 JSPS Postdoctoral position, Kyoto University, Japan

#### Research Visits

22nd to 30th **Visiting Researcher**, *Nottingham University*, Collaborator: Prof. Antonio Padilla and Benjamin April 2025 Muntz

### **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

#### 2025–2026 Daiwa Foundation Small Grant

Travel grant to cover costs of scientific visits to Nottingham and Kyoto/Tokyo by Prof. Antonio Padilla (PI), Benjamin Muntz (Co-PI) and Daniel Panizo (co-PI)

2024-2026 Kakenhi Grant, (Ref N: 24KF0232)

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.

□ panizofisico@gmail.com • iNSPIRE/Panizo • personal webpage

#### 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 accommodation expenses during my research visit to Arnold Sommerfeld Center (Munich) under Dieter Lüst supervision.

#### Invited Talks

- How does a non-Bunch Davis vacuum sound like?, Seminar at Nottingham University, UK (April 2025)
- o Experimental tests of dark bubble cosmology, (digital) seminar at IFT, Madrid (Nov 2023)
- Our Universe on a (Dark) Bubble, (digital) seminar at CAPT, University of Nottingham (Nov 2023)
- o A cosmological excursion to Dark Bubbles, (digital) talk at String Pheno seminars (Nov 2023)
- Our Universe on a (Dark) Bubble, (digital) seminar at Oviedo University Physics Department (Nov 2023)
- o Dark bubble cosmology, (digital) seminar at Kyoto University (Jul 2023)
- o Blowing bubbles from string theory, seminar at Helsinki Institute of Physics (Dec 2022)

## Teaching experience

- 2020–2024 **Teacher Assistant**, Classical Electrodynamics (10 ECTS)
- 2022–2023 **Teacher Assistant**, *Gravitation and Cosmology (10 ECTS)*
- 2022-2023 Lab Assistant, Mekanik III (på Svenska, 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

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