



### **Education**

2019–2024 Doctor of Philosophy, Uppsala University, Uppsala, (Sweden)

Blowing Bubbles from String Theory

advisors: Ulf Danielsson, Tobias Ekholm, Georgios Dimitroglou

Embedding of the dark bubble model in string theory and phenomenological conse-

quences

2016–2019 Degree of Master of Science (120 ECTS), Uppsala University, Uppsala, (Sweden)

Type IIB compactifications and string dualities

supervisor: Giuseppe Dibitetto

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 Experience

2024–2026 JSPS Postdoctoral position, Kyoto University, Japan

2019–2024 Ph.D., Uppsala University, Sweden

### Research Visits

Sep 2025 Visiting Researcher, Uppsala University, Collaborator: Prof. Ulf Danielsson, Dr.

Suvendu Giri and Dr. Vicent van Hemelryck

Apr 2025 Visiting Researcher, Nottingham University, Collaborator: Prof. Antonio Padilla

and Benjamin Muntz

Oct-Dec 2018 Visiting Student, LMU, Supervisor: Dieter Lüst

## | Teaching experience

2020-2024  $\circ$  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)

#### Invited Talks

Apr 2025  $\circ$  **How does a non-Bunch Davis vacuum sound like?**, seminar at Nottingham

*University*, UK

Nov 2023 Our Universe on a (Dark) Bubble, (digital) seminar at CAPT, University of

Nottingham, UK

Nov 2023 Experimental tests of dark bubble cosmology, (digital) seminar at IFT, Spain

Nov 2023 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, Spain

Jul 2023 Dark bubble cosmology, (digital) seminar at Kyoto University, Japan

Dec 2022 Blowing bubbles from string theory, seminar at Helsinki Institute of Physics,

Finland

### | Publications

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

# Computational Knowledge

	Level	Skill	Years	Comment
Language:	••••	Mathematica	7	Symbolic computations
	••••	Python	5	Object oriented coding + expertise in Manim libraries
	••••	Ŀ LEX	10	Articles, notes and grant applications written in LaTEX

## Languages

Spanish	Native	English	Proficient (C2)
Swedish	Fluent (B2/C1)	Japanese	Beginner (N5)
French	Beginner (A2)		