ERC Starting Grant 2025 Research proposal [Part B1] A very creative title PolyData

Cover Page:

- Name of the Principal Investigator (PI):
- Name of the PI's Host Institution for the project:
- Proposal duration in months:

Proposal Summary:

Section a: $Extended\ Synopsis\ of\ the\ scientific\ proposal$

[1]

References

[1] A. Montero. "Regular polyhedra in the 3-torus". In: Advances in Geometry 18.4 (2018), pp. 431–450. DOI: 10.1515/advgeom-2018-0017.

Section b: Curriculum vitae and Track Record

PERSONAL DETAILS

- Family name, First name: Montero, Antonio.
- Researcher unique identifier(s):

- ORCID: 0000-0002-3293-8517

- Google Scholar: GEJHkg0AAAAJ

- MathSciNet Author ID: 1293226

• URL for web site: anteromontonio.github.io

Education and key qualifications

19/08/2019 **Ph.D.** (Mathematics), Centro de Ciencias Matematicas, National Autonomous University of Mexico (UNAM), Mexico.

Under the supervision of Dr. Daniel Pellicer, with the thesis "Chiral extensions of toroids".

2015 M. Cs. (Mathematics), Centro de Ciencias Matematicas, National Autonomous University of Mexico (UNAM), Morelia, Mexico.

Thesis: "Realizaciones regulares de poliedros en el 3-toro (Regular realizations of polyhedra in the 3-torus)"

2013 **B. Cs.** (Mathematics and Physics), University of Michoacan, Morelia, Mexico.

Thesis: "Poliedros regulares en el 3-toro (Regular polyhedra in the 3-torus)"

Current position(s)

2022 – 2025 **Znanstveni sodelavec (Research associate, postdoctoral)**, Faculty of Mathematics and Physics, University of Ljubljana, Ljubljana, Slovenia.

2024 – Asistent IX-1 (Teaching assistant), Faculty of Education, University of Ljubljana, Ljubljana, Slovenia.

Previous position(s)

2020 - 2022	Becario postdoctoral (Postdoctoral fellow), Institute of Mathematics, Na-
	tional Autonomous University of Mexico (UNAM), Mexico City, Mexico.

2019 – 2020 **Postdoctoral fellow**, Department of Mathematics and Statistics, York University, Toronto ON, Canada.

RESEARCH ACHIEVEMENTS AND PEER RECOGNITION

Research achievements

Peer recognition

ADDITIONAL INFORMATION

Career breaks, diverse career paths and major life events

Other contributions to the research community