

Enric Solé-Farré

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Academic record

- **PhD Student at the London School of Geometry and Number Theory** Oct 2021 - currently
Supervisors: Prof. S. K. Donaldson (Imperial College London)
Prof. L. Foscolo (University College London - Sapienza Università di Roma)
Expected Thesis Defence Jul 2025
- **Theoretical and Mathematical Physics**, Elite Master Course, Oct 2019 - Sep 2021
Ludwig-Maximilians-Universität München & Technische Universität München
Average grade: 1.0 (top 1%)
Master thesis: **Instantons and foliations: Moduli spaces of instantons on foliated manifolds**
- Double major in **Mathematics and Physics**, University of Barcelona Sep 2015 - Jul 2019
Grades :
Mathematics: 9.1/10 (top 1%) Physics: 8.9/10 (top 3%)

Publications and preprints

- [1] E. Solé-Farré, *The Hitchin index in cohomogeneity one nearly Kähler structures*, Oct 2024, <https://arxiv.org/abs/2410.21106>
- [2] E. Solé-Farré, *Stability of nearly Kähler and nearly parallel G_2 -manifolds*, Oct 2024, <https://arxiv.org/abs/2410.21103>

References

- Prof. **Simon Donaldson** (PhD supervisor): `s.donaldson@imperial.ac.uk`
- Prof. **Lorenzo Foscolo** (PhD supervisor): `lorenzo.foscolo@uniroma1.it`
- Prof. **Simon Salamon**: `simon.salamon@kcl.ac.uk`
- Prof. **Mehdi Yazdi** (Teaching reference): `mehdi.yazdi@kcl.ac.uk`

Job positions

- **Teacher Assistant** at King's College London Jan 2022 - Ongoing
 - Manifolds (MSc) - Winter Semester 2022, 2023 and 2024
 - Geometry of surfaces (UG) - Spring Semester 2022, 2023, 2024 and 2025
 - Complex Analysis (UG) - Spring Semester 2024
 - Introductory Quantum Theory (UG) - Spring Semester 2022
- **Teacher Assistant** at University College London Oct 2023 - Jul 2024
 - Newtonian Mechanics (UG) - Spring Semester 2023 and 2024
 - Complex Analysis (UG) - Winter Semester 2023
 - Fluid Mechanics (UG) - Winter Semester 2022
- **Teacher Assistant** at Ludwig-Maximilians-Universität München Nov 2020 - Jul 2021
 - Mathematical Gauge Theory (MSc)- Summer Semester 2021
 - Topology I (MSc) - Winter semester 2020

Invited talks

- 14th May 2025: **The Hitchin and Einstein indices of cohomogeneity one nearly Kähler manifolds**, Duke Geometry Seminar, Duke University
- 9th May 2025: **The Hitchin and Einstein indices of cohomogeneity one nearly Kähler manifolds**, Waterloo Geometry Seminar, University of Waterloo
- 8th April 2025: **An approach to new G_2 -instantons on S^7** , Gauge Theory Learning Seminar, Rutgers University
- 17th March 2025: **Gauge theory in generalised Hopf bundles**, London Gauge Theory Days,
- 5th February 2025: **The Hitchin and Einstein indices of cohomogeneity one nearly Kähler manifolds**, Leeds Geometry Seminar, University of Leeds
- 11th December 2024: **The Hitchin and Einstein indices of cohomogeneity one nearly Kähler manifolds**, UCL Geometry Seminar, University College London
- 7th October 2024: **Hitchin Functionals and Einstein Coindex of Cohomogeneity-One Nearly Kähler Manifolds**, Geometry Oberseminar, University of Münster
- 20th December 2023: **Cohomogeneity one - From PDEs to groups and ODEs**, Junior Seminar, University of Barcelona
- 7th June 2023: **Deformations of G_2 -instantons on Sasaki-Einstein and 3-Sasaki manifolds**, Geometry Oberseminar, University of Hamburg

- 26th April 2023: **Deformations of G_2 -instantons on S^7** , Topology Seminar, Univeristy of Aberdeen
- 28th July 2022: **Mathematical applications of Gauge Theory**, GRP Barcelona 2022

Organised academic events and seminars

- 1st - 5th September 2025: **British Isles Graduate Workshop V: Mathematical General Relativity**
- 8th - 12th July 2024: **British Isles Graduate Workshop V: Mathematical General Relativity**
- 10th of June 2024: **Symmetries in Riemanniann Geometry - Symposium**
- September 2023 - June 2024: **UCL/KCL Junior Geometry Seminar**
- 30th August - 1st September 2023: **Queer In Number theory and Geometry (QuING) workshop**
- 3rd-7th July 2023: **British Isles Graduate Workshop IV: Flows & related topics**
- 11th November 2022: **Oxford-London Gauge Assembly (OLGA) 2022**
- October-December 2022: **LSGNT Lunch Seminar**
- 21st-24th June 2022: **Early Career Researchers in Mathematics (ECRM) 2022**

Funding & Awards

- **LMS Scheme 8:** support for BIGW IV, BIGW V and BIGW VI 2023, 2024 & 2025
- **Heilbronn Small Grant Scheme:** support for BIGW V and BIGW VI 2024 & 2025
- **Foundation Compositio Mathematica:** support for BIGW V 2023
- **Study Scholarship for Graduates** by the **DAAD**, full funding Sep 2019 - Sept 2021
- **1st Class Honours** in Mathematics at UB, awarded to the top 3 students Jul 2019

Programming experience

- **Python, C/C++ and HTML:** Intermediate level
- **Matlab:** Basic level

Languages

- **Catalan and Spanish:** Native competence
- **English:** Full professional competence

Certificate of Advanced English (CAE) (C1 in CEFR)

Mar 2013

- **French:** High professional competence

DELF B2 from the French Institute (B2 in CEFR)

Set 2015

- **German:** High professional competence (B2 in CEFR)

Last updated: April 14, 2025