

Annamaria Ortu

Curriculum Vitae

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Position

Postdoctoral researcher, *University of Gothenburg*.

November 2023 - present

Visiting Ph.D. student, *University of Cambridge and Gonville & Caius College*.

January - March 2022

Funded by Ruadhaí Dervan's Royal Society University Research Fellowship.

Education

Ph.D. in Geometry and Mathematical Physics, *SISSA Scuola Internazionale di Studi Superiori Avanzati*, Trieste, cum laude. **September 2023**

Thesis title: "The geometry of holomorphic submersions, their deformations and moduli". Supervisors: Ruadhaí Dervan and Jacopo Stoppa. Available on [Iris](#).

Master degree in Mathematics, *Università degli Studi di Trieste*, joint programme "Percorso formativo comune" with SISSA, cum laude. **September 2019**

Thesis title: "The constant scalar curvature equation on Kähler toric surfaces". Supervisor: Jacopo Stoppa.

Bachelor degree in Mathematics, *Università degli Studi di Milano Statale*.

July 2017

Publications and Preprints

Preprints

Moment maps and stability of holomorphic submersions, 2024.

ArXiv preprint: [2407.03246](#)

Constant scalar curvature Kähler metrics and semistable vector bundles, with Lars Martin Sektnan, 2024.

ArXiv preprint: [2406.08284](#)

The analytic moduli space of holomorphic submersions, 2023.

ArXiv preprint: [2306.09137](#)

Published articles

Optimal symplectic connections and deformations of holomorphic submersions, *Advances in Mathematics*, Vol 414, 2023.

<https://doi.org/10.1016/j.aim.2023.108868>

Invited Talks and Academic Visits

I participated in the thematic programme "New equivariant methods in algebraic and differential geometry", *Isaac Newton Institute, Cambridge*.

Spring 2024

Talks at Conferences

- Workshop “Kähler and non-Archimedean geometry”. **November 2024**
Lyon, France
- Workshop “*Special Geometric Structures and Analysis*”, within the programme “*Special Geometric Structures and Analysis*”. **September 2024**
SLMath-MSRI, Berkeley, California
- BRIDGES International Conference*. **July 2024**
Institut d’Études Scientifiques, Cargèse, Corsica
- Conference “*K-stability and moment maps*”, within the programme “*New equivariant methods in algebraic and differential geometry*”. **May 2024**
Isaac Newton Institute, Cambridge, UK
- Conference “*Asymptotic Methods in Complex Geometry*” in memory of Steve Zelditch. **March 2024**
Northwestern University, Illinois
- Conference “*Analytic Methods in Complex Geometry*”. **August 2023**
University of Münster, Germany
- Summer school “*Recent advances in Kähler geometry*”. **June 2023**
Le Croisic, France
- Conference “*Around Complex Geometry*”. **April 2023**
University of Illinois Chicago, Illinois
- AMS Eastern Spring Sectional Meeting, special session “*Recent advances in differential geometry*”. **April 2023**
Online
- Conference “*Complex Analysis and Complex Geometry*”. **September 2022**
Levico, Italy
- Conference “*Kähler and non-Kähler geometry: new developments and interactions*”. **June 2022**
Aarhus Institute of Advanced Studies, Denmark
- Workshop “*MARGE - Young researchers in Kähler and Hermitian geometry*”. **June 2022**
Université de Montpellier, France
- Conference “*EDGE Days 2021: Explicit K-stability and moduli problems*”. **December 2021**
University of Edinburgh, UK

Seminars

- Jagiellonian University, Krakow, *Geometry and Topology Seminar*. **October 2024**
- Indian Institute of Science, *Geometry and Topology Seminar*, online. **September 2024**
- University of Nottingham, *Algebraic Geometry Seminar*, online. **February 2024**
- Università di Parma, *Mathematics Seminar*. **October 2023**
- UQÀM, Montréal, *Kähler Geometry Seminar*. **April 2023**
- University of Glasgow, *Algebraic Geometry Seminar*. **March 2023**
- Università degli studi di Firenze, *Geometry Seminar*. **March 2023**
- Purdue University, *Geometric Analysis Seminar*. **October 2022**
- University of Illinois, Chicago, *Geometry and Topology Seminar*. **October 2022**
- Chalmers University, Gothenburg, *KASS Seminar*. **April 2022**

University of Cambridge, *Algebraic Geometry Seminar*. February 2022

Talks at Junior Events

Summer school “GAEL XXIX - Géométrie Algébrique en Liberté”. May 2022

Université Paris-Saclay. Contributed Talk

University of Cambridge, *Junior Geometry Seminar*. February 2022

King’s College, London, *KCL/UCL Junior Geometry Seminar*. February 2022

Conference “PhD Days 2021”. December 2021

Università degli studi di Milano Statale

Grant

GNSAGA - INdAM travel grant to visit Gábor Székelyhidi at Northwestern University. 2024

Activities I co-organised

Complex geometry seminar, within the programme “New equivariant methods in algebraic and differential geometry”. 2024

Isaac Newton Institute, Cambridge

SISSA Junior Geometry and Mathematical Physics Seminar. 2023

SISSA Junior Math Days. 2021

Graduate Interuniversity Math Seminar, *online*. 2021-2022

Teaching

TA for the master course Differential Geometry held at SISSA by Prof. Jacopo Stoppa. 2023

TA for the undergraduate course Geometria 3A (differential geometry of curves and surfaces) held at the University of Trieste by Prof. Mattia Mecchia, 20 hours. 2018

Service

Member of European Women in Mathematics.

Member of the INdAM group GNSAGA (Geometry group within the Italian Institute of Mathematics).

Outreach

Speaker at the event “Matematici al Lavoro” organised by the University of Trieste to present possible career paths to undergraduate students in Mathematics. May 2023

Volunteer in the “SISSA for School” programme run by SISSA Medialab to promote science and research among teenagers and children. 2020-2023