

Joaquim Serra

CONTACT INFORMATION	ETH Zurich, Department of Mathematics Rämistrasse 101, 8092 Zurich, Switzerland	joaquim.serra@math.ethz.ch
CURRENT POSITIONS	Assistant Professor of Mathematics at ETH Zurich External scientific member at BCAM Bilbao	01.2021 - 09.2021 -
EXPERIENCE	SNF Ambizione Fellow at ETH Zurich PI of SNF Ambizione grant (PZ00P2_180042) Postdoc at ETH Zurich Group of Prof. A. Figalli (ERC 2017-2022 721675) Postdoc at WIAS Berlin Group of Prof. E. Valdinoci (ERC 2011-2015 277749) Consultant at Arcvi Big Data Agency	09.2018 - 12.2020 09.2016 - 08.2018 01.2016 - 09.2016 04.2014 - 08.2015
EDUCATION	<i>Ph.D. in Mathematics</i> Universitat Politècnica de Catalunya (UPC) Advisor: Prof. Xavier Cabré <i>Bachelor's and Master's degrees in Mathematics</i> from UPC	2014 2010
DATE OF BIRTH	20th October 1986	
CITIZENSHIP	Spanish	
EDITORIAL BOARD	• Editor of <i>Ars Inveniendi Analytica</i> (https://ars-inveniendi-analytica.com) “A peer-reviewed journal in Mathematical Analysis, holding to the highest scientific standards, completely free for authors and readers”	07.2020 -
RESEARCH FUNDING	• Guarantor of Severo Ochoa 2021 Grant awarded to BCAM (4.000.000 EUR) • PI of ERC Starting Grant “StableIF” (01.01.2018-31.12.2025, 1.398.125 EUR) • PI of Starting grant from Fundación BBVA ¹ (35.000 EUR) • PI of SNF Ambizione grant PZ00P2_180042 (789.000 CHF)	
PRIZES	• <i>Frontiers of Science Awards</i> ² 2023 from the Chinese government [2 prizes awarded to 2 different papers of which I am co-author] • EMS Prize 2020 from the European Mathematical Society. • <i>José Luis Rubio de Francia Prize 2018</i> from the Royal Spanish Mathematical Society • <i>Antonio Valle Prize 2019</i> from the Spanish Society of Applied Mathematics • <i>Josep Teixidó Prize 2016</i> from the Catalan Mathematical Society	
SUPERVISION OF PHD STUDENTS AND POSTDOCS	• Marco Badran, postdoc at ETH (09.2023-) • Enric Florit, PhD student at ETH (09.2022-) • Michele Caselli, PhD student at SNS-Pisa ³ (09.2021-) • Federico Franceschini, PhD student at ETH ⁴ (09.2019-) • Alessandro Audrito, postdoc at ETH (09.2020-12.2022)	

¹Associated to Rubio de Francia Prize

²International prize awarded to 86 papers in all areas of Mathematics published in 2018– 2022 given by the government of China at the International Congress of Basic Science

³Co-supervised with Prof. Andrea Malchiodi

⁴Co-supervised with Prof. Alessio Figalli

- Simon Eberle, postdoc at BCAM⁵ (09.2021-08.2023)

OTHER
MENTORSHIPS
[BACHELOR THESES
NOT LISTED HERE]

- Antonio Casetta (ETH Zurich) — Master’s thesis (02.2023-)
- Filippo Paiano (Uni. Pisa) — Master’s thesis (02.2023-07.2023)
- Enric Florit (ETH Zurich) — Master’s thesis (02.2023-07.2023)
- Giacomo Colombo (SNS Pisa) — Master’s thesis (02.2022-07.2022)
- Julien Moy (ÉNS Paris) — research internship (02.2022-07.2022)
- Philippe Anjolras (ÉNS Paris) — research intership (02.2021-07.2021)
- Michele Caselli (ETH Zurich) — Master’s thesis (02-2021-07.2021)
- Anthony Salib (ETH Zurich) — Master’s thesis (09.2021-02.2022)
- Jingeon Ann (EPF Lausanne) — Master’s thesis (09.2021-02.2022)

TEACHING

- *Differential Geometry II*, ETH-Zurich, Spring 2023 (10 ECTS)
- *Differential Geometry I*, ETH-Zurich, Fall 2022 (10 ECTS)
- *Differential Geometry II* ETH-Zurich, Spring 2022 (10 ECTS)
- *Differential Geometry I* ETH-Zurich, Fall 2021 (10 ECTS)
- *Seminar on Classical Elliptic Regularity Theory*, ETH-Zurich, Spring 2021 (14 sessions)
- *Seminar on Fully Nonlinear Elliptic Equations*, ETH-Zurich, Fall 2017 (14 sessions)
- Assistant for *Measure and integration*, ETH-Zurich, Spring 2017 (22 hours of exercises)
- Assistant for *Differential Geometry I*, ETH-Zurich, Fall 2016 (13 hours of exercises)

SELECTED TALKS
AT CONFERENCES

- Geometric PDE, Warwick (United Kingdom), 12.2022
- Calculus of Variations and PDE, MFO Oberwolfach, 07.2022
- **Conference of the Australian Mathematical Society [plenary talk]** (online) 12.2021
- **8th European Congress of Mathematicians [EMS prize lecture]** (online) 06.2021
- **Barcelona Mathematical Days 2020 [plenary talk]** online, 10.2020
- Swedish Summer PDE at KTH, Stockholm (Sweden), 08.2019
- Oberwolfach Workshop “Partial Differential Equations”, MFO Oberwolfach (Germany), 07.2019
- Non Standard Diffusions in Fluids, Kinetic Equations and Probability, Marseille (France), 12.2018
- Recent advances in Geometric Analysis, Pisa (Italy), 06.2018
- **IV Congreso de Jóvenes Investigadores de la RSME [plenary talk]**, Valencia (Spain), 09.2017
- Recent Advances in PDEs and the Calculus of Variations, Venice (Italy), 07.2017
- **23rd Rolf Nevanlinna Colloquium**, Zurich (Switzerland), 06.2017
- Nonlinear, nonlocal problems and stochastic methods, Helsinki (Finland), 12.2016
- Partial Differential Equations in Valencia, Valencia (Spain), 10.2015

SELECTED
UNIVERSITY
SEMINARS AND
COLLOQUIA

- Brown University Colloquim (online), 10.2022
- Fields Geometric Analysis Colloquim (online), 12.2021
- IAS Analysis Seminar in Princeton, 12.2020
- Oberseminar (Max-Planck Institute + University) in Leipzig, 06.2020
- III Coloquio Premio Rubio de Francia at Universidad Auntonoma de Madrid, 10.2019
- Analysis Seminar at Universität Basel, 03.2017
- Oberseminar Analysis - Probability at MPI Lepzig, 07.2016
- Séminaire EDP-Analysen at University Lyon 1, 05.2016
- Analysis Seminar at UT Austin, 04.2016

⁵Co-supervised with Prof. Luis Vega.

- PDE seminar at Università di Roma Tor Vergata, 11.2013
- MINI-COURSES
- 6h course on the obstacle problem at the “JISD” at Centre de Recerca Matemàtica in Barcelona (Spain), July 2023
 - 8h course on the obstacle problem in the “Advanced PDE Seminar” at the Institute of Advanced Mathematics in Hangzhou (China), May 2019.
 - 6h course on integro-differential elliptic equations in the INDAM intensive period “Contemporary research in elliptic PDEs and related topic”, Bari, 05.2017 (6h)
- ORGANIZATION OF CONFERENCES
- Co-organizer of the conference “PDEs and Geometric Measure Theory” held at ETH Zürich from 29.10.2018 to 02.11.2018
- LANGUAGES
- Catalan and Spanish (native), English (fluent), Italian (fluent), German (basic)
- OTHER
- 3 Children; born 2013, 2018, and 2021.