

# Curriculum Vitae

## Personal Data

Title	Prof. Dr.
First name	Caterina Ida
Name	Zeppieri
Current position	Associate professor
Current institution, country	University of Münster, Germany
Identifiers/ORCID	0000-0002-8701-7045

## Qualifications and Career

Stages	Periods and Details
Degree programme	1997–2002 Diploma in Mathematics, Sapienza University of Rome, Italy
Doctorate	January 2007 “Multi-scale Analysis via $\Gamma$ -convergence”, supervisor Andrea Braides Sapienza University of Rome, Italy
Stages of academic/ professional career	since 10/2016 Associate professor (W2), University of Münster 10/12–09/16 Jr. professor (W1), University of Münster 11/10–09/12 postdoc, University of Bonn 11/09–10/10 postdoc, Hausdorff Center for Mathematics, Bonn 05/09–10/09 visitor, University of Bonn 05/07–04/09 postdoc, SISSA - International School for Advanced Studies, Trieste

## Supplementary Career Information

Maternity leave from 02/2014 to 11/2014

## Activities in the Research System

- 09/2019 Organizer of the “Sixth Applied Mathematics Symposium Münster: Recent Advances in the Calculus of Variations, University of Münster
- since 2019 Co-spokesperson of the Mathematics Münster Graduate School, University of Münster
- since 2018 PI Mathematics Münster Cluster of Excellence, University of Münster

## Supervision of Researchers in Early Career Phases

### Current PhD supervision

- Bastug, Mert, UM, 10/2023–09/2026 (expected)

## PhD theses completed under my supervision

- Piotr Wozniak On the variational convergence of high-contrast and stochastic functionals, UM, 2024
- Annika Bach Variational approximation of anisotropic free-discontinuity functionals, Münster, 2018
- Teresa Esposito Approximation of free-discontinuity problems via  $\Gamma$ -convergence, Münster, 2016

## Postdoc mentoring

- Dr. Francesco Deangelis (2024–2027)
- Dr. Dario Reggiani (2024–2027)
- Dr. Konstantinos Zemas (2020–2023)
- Dr. Roberta Marziani (2020–2022)

## Selected Publications

- Ansini, Nadia, Gianni Dal Maso, and Caterina Ida Zeppieri. “New results on  $\Gamma$ -limits of integral functionals”. *Ann. Inst. H. Poincaré C Anal. Non Linéaire* 31.1 (2014), pp. 185–202. DOI: 10.1016/j.anihpc.2013.02.005.
- Ansini, Nadia and Caterina Ida Zeppieri. “Asymptotic analysis of nonsymmetric linear operators via  $\Gamma$ -convergence”. *SIAM J. Math. Anal.* 44.3 (2012), pp. 1617–1635. DOI: 10.1137/110834330.
- Barchiesi, Marco, Giuliano Lazzaroni, and Caterina Ida Zeppieri. “A bridging mechanism in the homogenization of brittle composites with soft inclusions”. *SIAM J. Math. Anal.* 48.2 (2016), pp. 1178–1209. DOI: 10.1137/15M1007343.
- Cagnetti, Filippo, Gianni Dal Maso, Lucia Scardia, and Caterina Ida Zeppieri. “ $\Gamma$ -convergence of free-discontinuity problems”. *Ann. Inst. H. Poincaré C Anal. Non Linéaire* 36.4 (2019), pp. 1035–1079. DOI: 10.1016/j.anihpc.2018.11.003.
- Cagnetti, Filippo, Gianni Dal Maso, Lucia Scardia, and Caterina Ida Zeppieri. “A global method for deterministic and stochastic homogenisation in  $BV$ ”. *Ann. PDE* 8.1 (2022), p. 89. DOI: 10.1007/s40818-022-00119-4.
- Cagnetti, Filippo, Gianni Dal Maso, Lucia Scardia, and Caterina Ida Zeppieri. “Stochastic homogenisation of free-discontinuity problems”. *Arch. Ration. Mech. Anal.* 233.2 (2019), pp. 935–974. DOI: 10.1007/s00205-019-01372-x.
- Cicalese, Marco, Emanuele Nunzio Spadaro, and Caterina Ida Zeppieri. “Asymptotic analysis of a second-order singular perturbation model for phase transitions”. *Calc. Var. Partial Differential Equations* 41.1-2 (2011), pp. 127–150. DOI: 10.1007/s00526-010-0356-9.
- Müller, Stefan, Lucia Scardia, and Caterina Ida Zeppieri. “Geometric rigidity for incompatible fields, and an application to strain-gradient plasticity”. *Indiana Univ. Math. J.* 63.5 (2014), pp. 1365–1396. DOI: 10.1512/iumj.2014.63.5330.
- Ruf, Matthias and Caterina Ida Zeppieri. “Stochastic homogenization of degenerate integral functionals with linear growth”. *Calc. Var. Partial Differential Equations* 62.4 (2023), p. 36. DOI: 10.1007/s00526-023-02476-9.
- Scardia, Lucia and Caterina Ida Zeppieri. “Line-tension model for plasticity as the  $\Gamma$ -limit of a nonlinear dislocation energy”. *SIAM J. Math. Anal.* 44.4 (2012), pp. 2372–2400. DOI: 10.1137/110824851.

## **Academic Distinctions**

2012 Offer of a lectureship in Mathematics (tenured position) at the Faculty of Engineering and Physical Sciences, University of Surrey, UK (declined)