

Antonio Agresti

PERSONAL DETAILS

Date of birth 18 April 1992
Place of birth Fondi (LT), Italy
Email antonio.agresti@ist.ac.at, antonio.agresti92@gmail.com

RESEARCH INTERESTS

Stochastic partial differential equations, fluid dynamics, functional analysis, harmonic analysis.

POSTDOC POSITIONS

INSTITUTE OF SCIENCE AND TECHNOLOGY (IST) AUSTRIA Supervisor: Prof. J. Fischer	Klosterneuburg, Austria Sep 2021 –Current
KAISERSLAUTERN UNIVERSITY OF TECHNOLOGY Supervisor: Prof. A. Hussein	Kaiserslautern, Germany Mar 2021–Aug 2021

EDUCATION

PhD in MATHEMATICS Cum laude - Math Department G. Castelnuovo - Sapienza Università di Roma ◇ Thesis title: <i>Nonlinear parabolic stochastic evolution equations in critical spaces</i> Supervisor: Prof. M. Veraar (Delft University of Technology)	Rome, Italy 2017–2020
Master's Degree in MECHANICAL ENGINEERING 110 cum laude - Sapienza Università di Roma ◇ Thesis: <i>Controllo alternante per l'equazione delle onde</i> Supervisor: Prof. D. Andreucci, Co-supervisor: Prof. P. Loreti	Rome, Italy 2014–2017
Bachelor's Degree in MECHANICAL ENGINEERING 110 cum laude - Sapienza Università di Roma	Rome, Italy 2011–2014

VISITING

TU DARMSTADT AND TU KAISERSLAUTERN Supervisor: Prof. M. Hieber and Prof. A. Hussein	Darmstadt and Kaiserslautern, Germany 8 Nov 2021–12 Nov 2021
DELFT UNIVERSITY OF TECHNOLOGY Supervisor: Prof. M. Veraar	Delft, Netherlands 7 Feb 2022–18 Feb 2022 10 Nov 2019–7 Dec 2019 2 Jun 2019–13 Jul 2019 5 Nov 2018–7 Dec 2018

TUTORING

Tutor for Analysis II - Electronic engineering SAPIENZA UNIVERSITY OF ROME
Supervisor: Prof. P. Loreti

Rome, Italy
Nov 2020–Feb 2021
Nov 2019–Feb 2020
Nov 2018–Feb 2019
Nov 2017–Feb 2018
Nov 2016–Feb 2017

WORKSHOPS AND SEMINARS

Seminar in PDE and Applications at the TU DELFT, Delft (Netherlands) Feb 2022
Department Seminar at the TU DARMSTADT, Darmstadt (Germany) Nov 2021
2ND STOCHASTIC TRANSPORT IN UPPER OCEAN DYNAMICS ANNUAL WORKSHOP,
London (United Kindom) Sep 2021
PDE AND RANDOMNESS, Bath (United Kindom) Sep 2021
Contributed talk at the 8TH EUROPEAN CONGRESS OF MATHEMATICS, Portorož (Slovenia) Jun 2021
Department Seminar at the TU KAISERSLAUTERN, Kaiserslautern (Germany) May 2021
Department Seminar at the IST AUSTRIA, Vienna (Austria) Jan 2021
Contributed talk at the V CONGRESO DE JOVENES INVESTIGADORES 2020, Castello (Spain) Jan 2020
Department Seminar at the TU DELFT, Delft (Netherlands) Nov 2019
EQUADIFF 2019, Leiden (Netherlands) Nov 2019
RECENT TRENDS IN STOCHASTIC ANALYSIS AND SPDES, Pisa (Italy) Jul 2019
Contributed talk at the INTERNATIONAL CONFERENCE ON ELLIPTIC AND PARABOLIC PROBLEMS,
Gaeta (Italy) May 2019
Contributed talk at the 15TH INTERNATIONAL CONFERENCE ON INFORMATICS IN CONTROL,
AUTOMATION AND ROBOTICS (ICINCO), Porto (Portugal) Jul 2018
Contributed talk at HARMONIC ANALYSIS FOR STOCHASTIC PDES, Delft (Netherlands) Jul 2018
Contributed talk at SIMAI 2018, Rome (Italy) Jul 2018
Department Seminar at the TU DELFT, Delft (Netherlands) Apr 2018
Contributed talk at the INTERNATIONAL CONFERENCE ON ELLIPTIC AND PARABOLIC PROBLEMS,
Gaeta (Italy) May 2017

SCHOOLS

NEW FRONTIERS IN SINGULAR SPDES AND SCALING LIMITS, Bonn (Germany) Sep 2019
RANDOM INTERFACES, Augsburg (Germany) Mar 2019
STOCHASTIC PDES AND MEAN-FIELD GAMES, Bologna (Italy) Jan 2019
DEVELOPMENTS IN STOCHASTIC PARTIAL DIFFERENTIAL EQUATIONS, Varese (Italy) Jul 2018

REFEREE/REVIEWER

Advances in Operator Theory
Journal of Mathematical Analysis and Applications
Nonlinear Differential Equations and Applications
Stochastic Analysis and Applications

LANGUAGES

Italian Mother tongue
English Good knowledge

Articles

- [1] A. Agresti, M. Veraar, *Nonlinear parabolic stochastic evolution equations in critical spaces Part II: Blow-up criteria and instantaneous regularization*, to appear in Journal of Evolution Equations.
- [2] A. Agresti, M. Veraar, *Nonlinear parabolic stochastic evolution equations in critical spaces Part I: Stochastic maximal regularity and local existence*, to appear in Nonlinearity.
- [3] A. Agresti, P. Loreti, D. Sforza, *Time memory effect in entropy decay of Ornstein-Uhlenbeck operators*, Minimax Theory Appl. 6:(2), 2021.
- [4] A. Agresti, D. Andreucci, P. Loreti, *Alternating and Variable Controls for the wave equation*, ESAIM Control Optim. Calc. Var. 26:(38), 2021.
- [5] A. Agresti, M. Veraar, *Stability properties of Stochastic maximal L^p -regularity*, J. Math. Anal. Appl. 482:(2), 2020.

Proceedings

- [6] A. Agresti, D. Andreucci, P. Loreti, *Variable Support Control for the Wave Equation - A Multiplier Approach*, Proceedings of the 15th International Conference on Informatics in Control, Automation and Robotics (ICINCO), 1, 2018.

Book Chapters

- [7] A. Agresti, D. Andreucci, P. Loreti, *Observability for the Wave Equation with Variable Support in the Dirichlet and Neumann Cases*, Informatics in Control, Automation and Robotics, 613, 2019.

Preprints

- [8] A. Agresti, M. Hieber, M. Saal, A. Hussein, *The stochastic primitive equations with transport noise and turbulent pressure*, arXiv preprint arXiv:2109.09561.
- [9] A. Agresti, A. Hussein, *Maximal L^p -regularity and H^∞ -calculus for block operator matrices and applications*, arXiv preprint arXiv:2108.01962.
- [10] A. Agresti, M. Veraar, *Stochastic Navier-Stokes equations for turbulent flows in critical spaces*, arXiv preprint arXiv:2107.03953.
- [11] A. Agresti, M. Veraar, *Stochastic maximal $L^p(L^q)$ -regularity for second order systems with periodic boundary conditions*, arXiv preprint arXiv:2106.01274.
- [12] A. Agresti, M. Veraar, *On the trace embedding and its applications to evolution equations*, arXiv preprint arXiv:2104.05063.
- [13] A. Agresti, *A quasilinear approach to fully nonlinear parabolic SPDEs on \mathbb{R}^d* , arXiv preprint arXiv:1712.00797.

In preparation

- [14] A. Agresti, M. Veraar, *Quasilinear stochastic reaction-diffusion equations: Global existence and regularity*.
- [15] A. Agresti, *On the stability of global 3D-solutions to the stochastic Navier-Stokes equations for turbulent flows with rough data and applications*.