

TEODOR RUGINĂ

+40751275750

✉ teorugina@yahoo.com

R researchgate.net/profile/Teodor-Rugina-2

ACADEMIC QUALIFICATIONS

October 2021 - Present PhD Studies in Mathematics,
University of Bucharest

October 2019 - June 2021 Master's Degree in Mathematics,
University of Bucharest

Relevant coursework: Geometric aspects in PDEs, Evolution PDEs
Complements of Functional Analysis
Spectral Theory, Distribution Theory
Algebraic Topology, Riemannian Geometry

Graduated top 10% of my class

October 2018 - June 2019 Superior Normal School Bucharest (SNSB),
"Simion Stoilow" Institute of Mathematics of the Romanian Academy

Relevant coursework: Harmonic Analysis, Calderon-Zygmund Theory
Evolution PDEs

October 2016 - June 2019 Bachelor's Degree in Mathematics,

University of Bucharest
Faculty of Mathematics and Computer Science
Relevant Coursework: Real Analysis, Functional Analysis
Partial Differential Equations
Riemannian Geometry

Graduated top 10% of my class

EXPERIENCE

Research assistant, "Gheorghe Mihoc – Caius Iacob" Institute of Mathematical Statistics
and Applied Mathematics of the Romanian Academy *September 2024 - present*

Research assistant, Research Grant *May 2022 - May 2024*

Project: Grant of the Ministry of Research and Innovation, CNCS-UEFISCDI, project number
PN-III-P1-1.1-TE-2021-1539 "Sharp analysis of partial differential operators".

Research: Hardy-type inequalities in L^2 and L^p -setting for multipolar potentials; Removable singularities problem for Schrödinger operators with multipolar potentials.

TEACHING

Teaching assistant, Faculty of Mathematics and Computer Science October 2021 - present

Description: Teaching seminars for 1st year students in Linear Algebra and Mathematical Analysis. Hourly-payment position (3-4 hours/week).

AWARDS & SCHOLARSHIPS

National Session of Scientific Communications, 1st place May 2021
Faculty of Mathematics and Computer Science, University of Bucharest

Merit Scholarship, University of Bucharest 2016-2019, 2020-2021

PUBLICATIONS

1. C. Cazacu and T. Rugină, *Sharp second order inequalities with distance function to the boundary and applications to a singular p -Biharmonic problem*, SIAM J. Math. Anal., 58 (2026), no. 1, pp. 206-237; DOI: [here](#)
2. C. Cazacu, G. Marinoschi and T. Rugină, *H^∞ -control problem for a system of singular parabolic equations with convection*, Evol. Equ. Control Theory, 16 (2026), pp. 216-231. DOI: [here](#).
3. C. Ciulică and T. Rugină, *Sharp multipolar L^p -Hardy-type inequalities on Riemannian manifolds*, J. Geom. Anal. 35 (2025), no. 12, Paper No. 378, 23 pp. DOI: [here](#).
4. C. Cazacu and T. Rugină, *Best constants in bipolar L^p -Hardy-type Inequalities*, J. Math. Anal. Appl. 530 (2024), iss. 1, 127635. DOI: [here](#).

CONFERENCES AND SUMMER SCHOOLS

1. **Workshop Happy PDE's** December 11-12, 2025
IMAR, Bucharest Romania
Talk: *Sharp second order inequalities with distance function to the boundary*
Conference site: [here](#).
2. **10th French-Romanian Summer School on Applied Mathematics** July 9-17, 2025
UB Campus Sinaia, Sinaia, Romania
Conference site: [here](#).
3. **Summer School: Mathematical Analysis and Applications** June 9-13, 2025
Villa del Grumello, Como, Italy.
Poster: *Sharp second order inequalities with distance function to the boundary*
Conference site: [here](#).
4. **14th Workshop for Young Researchers in Mathematics** May 15 -16, 2025
A. I. Cuza University, Iași, Romania

- Talk: *Sharp second order inequalities with distance function to the boundary*
 Conference site: [here](#).
5. **Workshop Happy PDE's** December 13, 2024
 IMAR, Bucharest Romania
 Talk: *Removable singularities for some singular elliptic equations*
 Conference site: [here](#).
 6. **LMS Summer School: Bridging PDEs and Geometric Flows** July 22-26, 2024
 Cardiff University, Cardiff, Wales.
 Conference site: [here](#).
 7. **9th French-Romanian Summer School on Applied Mathematics** July 10-18, 2024
 UB Campus Sinaia, Sinaia, Romania
 Conference site: [here](#).
 8. **Mini-courses in Mathematical Analysis** June 24-28, 2024
 University of Padova, Padova, Italy.
 Talk: *Sharp constants in L^p -Hardy and Rellich inequalities*
 Conference site: [here](#).
 9. **13th Workshop for Young Researchers in Mathematics** May 23 -24, 2024
 A. I. Cuza University, Iași, Romania
 Talk: *Hardy-Rellich Inequalities in domains of \mathbb{R}^N and applications*
 Conference site: [here](#).
 10. **Analysis and Potential, on the Anniversary of Prof. G. Bucur** January 23-26, 2024
 IMAR, Bucharest, Romania
 Talk: *Hardy-Rellich Inequalities in domains of \mathbb{R}^N and applications*
 Conference site: [here](#).
 11. **International Conference on Applied and Pure Mathematics** November 9-12, 2023
 A. I. Cuza University, Iași, Romania
 Conference site: [here](#).
 12. **8th French-Romanian Summer School on Applied Mathematics** July 5-13, 2023
 UB Campus Sinaia, Sinaia, Romania
 Conference site: [here](#).
 13. **The Tenth Congress of Romanian Mathematicians** June 30 - July 5, 2023
 University of Pitești, Pitești, Romania
 Conference site: [here](#).
 14. **12th Workshop for Young Researchers in Mathematics** May 18 -19, 2023
 A. I. Cuza University, Iași, Romania
 Talk: *H^∞ – control problem for parabolic systems with singular inverse-square potential*
 Conference site: [here](#).
 15. **Workshop Geometric Aspects of Evolution and Control** April 17 -21, 2023
 FernUniversität, Hagen, Germany

Poster: H^∞ – control problem for parabolic systems with singular inverse-square potential
Conference site: [here](#).

16. **School on nonlinear PDEs** May 15 -20, 2022
University of Warsaw, Warsaw, Poland
Conference site: [here](#).
17. **11th Workshop for Young Researchers in Mathematics**, online May 19-20, 2022
Talk: *Best constants in L^p –Hardy inequalities with bipolar potential*
Conference site: [here](#).
18. **The Ninth Congress of Romanian Mathematicians** June 28 - July 3, 2019
University of Galați, Galați, Romania
Conference site: [here](#).
19. **9th Workshop for Young Researchers in Mathematics** June 3-4, 2019
Faculty of Mathematics and Computer Science, Bucharest, Romania Conference site: [here](#).

COMPETENCES

Computer skills

I can work efficiently with Microsoft Office Package and LaTeX.

Languages

Certificate in Advanced English - level B2

Romanian Baccalaureate Certificate in English - level B2