



ANA-MARIA ORITĂ

+40 764 700 223
Ana-Maria Orită

anamariaorita@yahoo.com
Clermont-Ferrand, France

WORK EXPERIENCE

PERIOD	February 2024 — June 2024	
INSTITUTION	Université Clermont Auvergne – LMBP	Clermont-Ferrand, France
POSITION	Research Intern	
FUNDED BY	International Research Center on Innovative Transport and Production Systems	
TOPIC	Spectral analysis of the Laplacian: from continuous to discrete. Applications to the controllability of PDEs.	
	<ul style="list-style-type: none">▪ Developed research on the spectral properties of the Laplacian in continuous and discrete settings, using high-order finite differences and finite elements.▪ Investigated theoretical links between spectral behavior and controllability of 1d wave equation.	
PERIOD	August 2022 — August 2023	
EMPLOYER	WAY2VAT	Craiova, Romania
POSITION	Data Operator	
	<ul style="list-style-type: none">▪ Performed accurate data entry and validation for global financial documents.▪ Delivered training to new team members, improving onboarding and data consistency.▪ Maintained data quality controls in collaboration with internal teams.▪ Analyzed metrics to improve data accuracy and efficiency.	
PERIOD	May 2023	
EMPLOYER	SIGMA Center	Craiova, Romania
POSITION	Mathematics tutor	
	<ul style="list-style-type: none">▪ Prepared students for tests and national exams.	

EDUCATION

PERIOD	October 2024 — Present	
INSTITUTION	Université Clermont Auvergne – LMBP	Clermont-Ferrand, France
DEGREE	PhD in Applied Mathematics	
FUNDED BY	International Research Center on Innovative Transport and Production Systems	
THESIS	Numerical analysis and controllability of some second order in time PDEs	
	<ul style="list-style-type: none">▪ Explored the impact of high-order finite difference schemes on PDEs controllability, including wave and Euler–Bernoulli equations.▪ Derived recurrence formulas for constructing high-order discretization matrices, enabling efficient and precise numerical control.▪ Investigated spectral and structural properties of high-order discretization matrix coefficients to reveal stability and control patterns.	
PERIOD	September 2023 — July 2024	
DEGREE	Master 2 in Mathematics	
UNIVERSITY	Université Clermont Auvergne	Clermont-Ferrand, France
RESULT	Final average: 16.83/20	Ranked 1 st in the program
PERIOD	October 2022 — July 2024	
DEGREE	Master in Applied Mathematics	
UNIVERSITY	University of Craiova	Craiova, Romania
THESIS	Approximation of controls for the 1d wave equation	
	<ul style="list-style-type: none">▪ Studied finite difference control approximations and spectral properties for the 1d wave equation.	
PERIOD	October 2019 — July 2022	
DEGREE	Bachelor in Mathematics and Computer Science	
UNIVERSITY	University of Craiova	Craiova, Romania
RESULT	Final average: 9.84 / 10	Ranked 1 st in the program
THESIS	Optimization elements in convex analysis	
	<ul style="list-style-type: none">▪ Investigated convex programming problems, primal-dual structures, saddle point and Minimax theory for rigorous optimization analysis.	
PERIOD	October 2019 — July 2024	
DEGREE	Level I and II Teaching Diploma	
DEPARTMENT	Teacher Training Department	Craiova, Romania

SKILLS

Languages: Romanian (native), English, French, Spanish
Digital: Python, Julia, FreeFem++
Soft: analytical thinking, adaptability, time management, assertiveness, team-oriented

PROJECTS

INNOMATH	Innovative Enriching Education Process for Mathematically Gifted Students in Europe
	<ul style="list-style-type: none">▪ Participated in workshops and discussions focused on enhancing educational strategies for gifted students in mathematics.
MATHLIFE	Math, or what you can do for a better life tomorrow
	<ul style="list-style-type: none">▪ Participated in a team project that won funding for promoting mathematics education, raising awareness of the practical value of mathematics.
SCIENTIFIC DAYS	Journées Scientifiques de l'EDSF
	<ul style="list-style-type: none">▪ Assisted in coordinating a two-day event showcasing PhD research through accessible presentations for both academic and non-specialist audiences.

PUBLICATIONS

- 2025 **Uniform boundary observability for a fourth order finite-differences semi-discretization of the 1-d wave equation.**
Nicolae Cîndea , Ana-Maria Orită, Ionel Roventa
▪ Article available on [HAL](#).

TALKS

- "Some remarks on high-order finite-differences schemes. Consequences on the observability of the wave equation." Journée de l'équipe Equations aux Dérivées Partielles et Analyse Numérique du Laboratoire de Mathématiques Blaise Pascal, 2026 ([link](#)). Clermont Ferrand, France

CONFERENCES, SEMINARS AND SUMMER SCHOOLS

- Journée de l'équipe Equations aux Dérivées Partielles et Analyse Numérique du Laboratoire de Mathématiques Blaise Pascal, 2026 ([link](#)). Clermont Ferrand, France
- Journées Équations aux Dérivées Partielles Auvergne-Rhône-Alpes, 2025 ([link](#)). Lyon, France
- 9th Regional French-Romanian Summer School on Applied Mathematics, July 2024 ([link](#)). Sinaia, Romania