

# Workshop for Young Researchers in Mathematics

13th edition, May 23-24, 2024

## ANALYSIS, PDES & APPLIED MATHEMATICS – SCHEDULE –

All talks will be held in: Sala de Conferințe a Facultății de Matematică.

Thursday, May 23

<b>9:50</b>	Welcome to WYRM2024! Opening remarks by Prof. Dr. Răzvan Lițcanu in the Myller Amphitheater
<b>10:00-10:30</b>	<b>Ovidiu-Neculai Avădanei</b> , University of California, Berkeley <i>Low regularity well-posedness for the generalized surface quasi-geostrophic front equation</i>
<b>10:30-11:00</b>	<b>Dragoș Manea</b> , IMAR <i>Atmospherical frontogenesis in vortex liquid mixing and optimal placement</i>
<b>11:00-11:30</b>	Morning Coffee Break
<b>11:30-12:00</b>	<b>Anisia Teca</b> , University of Craiova <i>The limiting behavior of constrained minimizers in variable exponent spaces</i>
<b>11:50-12:30</b>	<b>Teodor Rugină</b> , University of Bucharest <i>Hardy-Rellich Inequalities in domains of <math>\mathbb{R}^N</math> and applications</i>
<b>12:30-14:30</b>	Lunch Break
<b>14:30-15:00</b>	<b>Eduard Curcă</b> , Alexandru Ioan Cuza University <i>Pathological sums of Sobolev spaces and some counterexamples</i>
<b>15:00-15:30</b>	<b>Bogdan Raiță</b> , Georgetown University <i>Self improving size estimates in compensated compactness</i>
<b>15:30-16:00</b>	Afternoon Coffee Break
<b>16:00-16:30</b>	<b>Liviu Ignat</b> , IMAR & ICUB, University of Bucharest <i>Approximations of the best constants</i>

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Friday, May 24

10:00-10:30	<b>Geanina Maria Lăchescu</b> , University of Craiova <i>Jensen-Steffensen's inequalities in the context of majorization theory and in spaces with a curved geometry</i>
10:30-11:00	<b>Andrei Gasparovici</b> , Babes-Bolyai University <i>Mixed Dirichlet-Robin problem for coupled anisotropic Darcy-Forchheimer-Brinkman equations</i>
11:00-11:30	Morning Coffee Break
11:30-12:00	<b>Mihai Bucătaru</b> , University of Bucharest & ISMMA <i>Accelerated iterative algorithms for the Cauchy problem in steady-state anisotropic heat conduction</i>
12:00-12:30	<b>Andreea Dima</b> , IMAR <i>Isoperimetric problems on the square and hexagonal lattices</i>
12:40	Group Photo – @ the fountain entrance
12:40-14:30	Lunch Break
14:30-15:00	<b>Radu-Adrian Mihai</b> , Politehnica University of Bucharest <i>A 2D + time mathematical model for multiphase optimization of air traffic trajectory and sequence</i>
15:00-15:30	<b>Dan Paraschiv</b> , IMAR & IMFM Ljubljana <i>On a Mandelbrot-like set for a family of exponential maps</i>
15:30-16:00	Afternoon Coffee Break