

# WODCA 2025—Workshop on Optimization, Dynamics, and Convex Analysis

on the occasion of the 65<sup>th</sup> anniversary of Prof. Alexander Plakhov

June 11-14, 2025, Aveiro, Portugal

Website: https://sites.google.com/view/wodca2025/

Organized by a team of professors and researchers from the Department of Mathematics at the University of Aveiro, with the scientific support of CIDMA—Center for Research & Development in Mathematics and Applications and the University of Algarve, this workshop celebrates the 65th anniversary of Prof. Alexander Plakhov.

Prof. Alexander Plakhov has devoted more than 25 years of scientific work to the University of Aveiro. His remarkable contributions, published in over 100 papers and books, are deeply intertwined with many of the workshop's themes. An associate professor with habilitation at the Department of Mathematics, Prof. Plakhov has been coordinating CIDMA's research group on Optimization, Graph Theory, and Combinatorics since 2018.

**Aims and Scope:** The workshop aims to bring together researchers in Billiard Theory, Dynamic Systems, Optimal Mass Transportation, Control, and Optimization.

**Topics:** Billiards, Optimal mass transport, the Kakeya needle problem, Convex Geometry, Calculus of Variations, Applications of Mathematics in Mechanics, Dynamical Systems, Optimal Control, Mathematical Modelling, Mathematical Programming, Convex analysis, Convex Optimization, Integer Programming.

Chairs: Tatiana Tchemisova, Delfim F.M. Torres, and João Pedro Cruz.

Organizing Committee: Enide Andrade, Paula Carvalho, João Pedro Cruz,

Sofia Pinheiro, Paula Rama, Daniel Graça, Tatiana Tchemisova,

and Delfim F.M. Torres

#### **Confirmed Invited Speakers:**

Michael Bialy – Tel Aviv University, Israel Leonid Bunimovich -- Georgia Institute of Technology, USA, Giuseppe Buttazzo – University of Pisa, Italy, Robert Mc Cann -- University of Toronto, Canada, Aleksey Davydov -- Moscow State University, Russia, **Alexey Glutsyuk** - Ecole Normale Supérieure de Lyon, France Konstantin Khanin -- University of Toronto, Canada, Sergey Kryzhevich – Gdansk University of Technology, Poland, Mark Levi -- Penn State, USA, Lev Lokutsievskiy -- Steklov Mathematical Institute of RAS, Russia, Gennady Mishuris - Aberystwyth University, UK, Olga Paris-Romaskevich -- Mathematics Institute in Marseille, France, Aleksey B. Piunovskiy -- University of Liverpool, UK, **Vladimir Protasov** -- University of L'Aquila, Italy, Vera Roshchina -- University of New South Wales, Sydney, Australia, Sergey Tabachnikov -- The Pennsylvania State University, USA **Delfim Torres**— University of Aveiro, Portugal, Pavel Zatitskii -- University of Cincinnati, USA Victor Alexandrov -- Sobolev Institute of Mathematics, Russia

### Registration:

### Regular registration fee:

Early Bird (till May 5, 2025) – 300 Euros Late Bird (till May 25, 2025) – 360 Euros

## Student registration fee:

Early Bird (till May 5, 2025) – 150 Euros Late Bird (till May 25, 2025) – 180 Euros

Accompanying person (Social program and the Conference Dinner): 80 Euros

**Registration includes** participation in all sessions of the Workshop; kit of materials, coffee-breaks, and social program (including the Conference Dinner).

**Student registration** includes participation in all sessions of the Workshop; a kit of materials, coffee-breaks, and a social program (except the Conference Dinner).

**Presentations.** The participants are invited to submit the abstract of their talk which will be accepted for presentation in the form of either an oral talk or a poster presentation.

**Special Issue.** A Special Issue of the Journal of Convex Analysis (JCA), https://www.heldermann.de/JCA/jcacover.htm, will be dedicated to the 65<sup>th</sup> anniversary of Alexander Plakhov and the participants of the Workshop can submit their papers to this issue. Please follow the instructions on the conference website.

## Important dates:

Abstract submission: April 20, 2025

Information about acceptance: April 27, 2025

Workshop: June 11-14, 2025

Submission to the Special Issue of the Journal of Convex Analysis: June 30, 2025