

## Colóquio CIDMA / DMat

20 de março, 15h00

Anf. 11.1.3

### What to do with strong singularities in differential equations?

Michael Ruzhansky

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In this lecture, we will give a brief overview of several approaches dealing with PDEs with singularities of different strengths. Then we will concentrate on discussing the new method of very weak solutions, allowing one to deal with their well-posedness.

#### Short Bio



Michael Ruzhansky is currently a Senior Full Professor in the Department of Mathematics of Ghent University and Senior Research Professor of the Special Research Fund (BOF) at the same institution. He has also a Professorship in the School of Mathematical Sciences of the Queen Mary University of London and an Honorary Professorship in the Department of Mathematics of the Imperial College London. He made significant research contributions, particularly in areas involving non-homogeneous partial differential equations and Fourier analysis on various types of groups and manifolds. His work includes extensive research in functional analysis, pseudodifferential operators, and their applications in mathematical physics. Michael Ruzhansky is recognized for his publications, collaborations, and leadership in the field of mathematical analysis. He was awarded by FWO (Belgium) the Prestigious Odysseus 1 Project in 2018. He was a recipient of several prizes and awards: the ISAAC Award in 2007, the Daiwa Adrian Prize in 2010, and the Ferran Sunyer I Balaguer Prizes in 2014 and 2018. He is the author/co-author of several monographs, books, journal articles and other research works in several fields of Mathematics. More information can be found on the website: <https://ruzhansky.org/>.

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