

# ANALYSIS, GEOMETRY AND TOPOLOGY DEPARTMENT

## ANNUAL SCIENTIFIC SESSION 2021

7 December 2021

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*Dedicated to the 90-th anniversary of Professor Peter Rusev*

**9:30** Opening: N. Nikolov

*Chair: O. Muskarov*

**9:35** J. Paneva-Konovska, V. Kiryakova, J. Davidov – 90-th anniversary of Professor Peter Rusev

**10:00** V. Kiryakova – A guide to special functions of fractional calculus: and about the “Laguerre derivatives and functions“ and other “innovations”

**10:15** J. Paneva-Konovska – Le Roy type functions. Inequalities and series in the complex plane

**10:30** R. Kovacheva – Multipoint Pade approximants with respect to regular Borel measures - direct and inverse interpolation results

**10:45** Coffee Break

*Chair: J. Paneva-Konovska*

**11:00** E. Bazhlekova – On a generalization of the Mittag-Leffler function

**11:15** S. Terzian – Two nonzero weak solutions for a quasilinear Kirchhoff type problem

**11:30** S. Hakkaev – Stability of periodic waves for the Lugiato-Lefever model

**11:45** I. Dimovski, Yu. Tsankov – Explicit solution for a nonlocal BVP for the heat equation

**12:00** Lunch break

*Chair: V. Kiryakova*

- 13:00** J. Davidov, O. Muskarov, G. Grantcharov – Neutral Hermitian surfaces and Killing vector fields
- 13:15** N. Nikolov – Comparison and localization of invariant distances on strongly pseudoconvex domains
- 13:30** V. Milousheva, O. Kassabov – Minimal surfaces and Weierstrass representations
- 13:45** S. Ivanov – Heterotic supersymmetry and equations of motion
- 14:00** M. Genov – Towards homological mirror symmetry for weighted complex projective planes for beginners
- 14:15** Coffee Break

*Chair: V. Milousheva*

- 14:30** A. Rangachev – A valuation theorem for Noetherian rings
- 14:45** P. Petrov – Drinfeld's theorem in arc spaces
- 15:00** S. Barov – Geometric tomography: more on reconstruction of sets in Hilbert space  $\mathbb{R}^2$
- 15:15** S. Popvassilev – On Minkowski differences of plane continua
- 15:30** Z. Atanasov – Almost periodic differential equations with discontinuous right-hand sides

ZOOM meeting:

<https://us02web.zoom.us/j/88915016332?pwd=eGk0eXAzMV FYRVA vZlpRU1BSNDFUUT09>