



Dear Colleagues!

The V. Kupradze Institute of Mathematics at the University of Georgia is pleased to invite you to the Online Tbilisi Analysis & PDE Seminar. The seminar is held bi-weekly on Wednesdays at 20:00 (GMT+4) local time in Tbilisi.

Talk on April 22, 2026

Speaker: Professor **Jürgen Prestin**, University of Lübeck, Germany;

E-mail: juergen.prestin@uni-luebeck.de;

<https://research.uni-luebeck.de/en/persons/juergen-prestin/>

The title of the lecture: “**Interpolation for functions of bounded variation**”

Abstract: The talk will deal with error estimates in L^p norms for polynomial interpolation. The concept of bounded variation proves to be very useful in order to also consider interpolation for discontinuous functions in a meaningful way. In order to transfer such error estimates to the multivariate case, a concept of multivariate bounded variation is required. Here we use the Hardy-Krause version of the definition of bounded variation, which we also apply to the general d -variate case. In the case of interpolation methods, we compare blending approaches with tensor product interpolation and interpolation on the sparse grid. This talk is a joint work with Evgeniya Semenova (Institute of Mathematics, NASU Kyiv).

References

- [1] J. PRESTIN, Y.V. SEMENOVA, A Boolean sum interpolation for multivariate functions of bounded variation, *Front. Appl. Math. Stat.* 10:1489137 (2024).
- [2] J. PRESTIN, M. TASCHÉ, Trigonometric interpolation for bivariate functions of bounded variation, in: *Approximation and Function Spaces*, Banach Center Publ., Vol. 22, PWN, Warsaw 1989, 309-321.

Date: April 22, 2026

Time: 20:00 (GMT+4) local time in Tbilisi;

(Compare to your local time: <https://www.timeanddate.com/worldclock/georgia/tbilisi/>);

How to join:

The seminar is organized on the **Google Meet** platform. If you are already registered, you do not need to register again. Otherwise, to join the seminar, please send an email to kim@ug.edu.ge or register here:

<https://forms.gle/xfQJ9fg1uqe7CrZw6>.

You will then receive further information.

WEB of Seminar: <https://ug.edu.ge/en/tbilisi-analysis-and-pde-seminars>.

Organizers:

1. R. Duduchava, Institute of Mathematics, University of Georgia, Tbilisi, Georgia
2. E. Shargorodsky, Department of Mathematics, King's College London, UK
3. A. Meskhi, Kutaisi International University, Kutaisi, Georgia

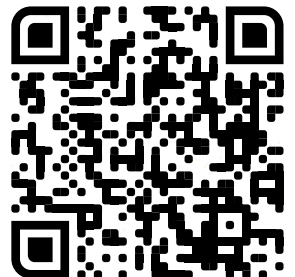
Secretary:

M. Tsaava, Institute of Mathematics, University of Georgia, Tbilisi, Georgia

Technical support:

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Google Meet Join Information

- **Video Call Link:** <https://meet.google.com/fes-ughx-mob>
- **Invitation (Calendar) Link:** <https://calendar.app.google/7GxkYetKVZVAEpsc8>