



Dear Colleagues!

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

**Talk on December 19, 2024**

**Speaker:** Prof. Massimo Lanza de Cristoforis, University of Padua, Italy.  
<https://www.math.unipd.it/~mldc/>

**"Normal derivatives on the boundary of Hölder continuous solutions of the Poisson equation"**

**Abstract:** We plan to introduce a distributional form of the normal derivative on the boundary for Hölder continuous solutions of the Poisson equation, which may have infinite Dirichlet integral. Then we characterize the space for the first order traces of the normal derivatives and we present some application to the solution of the Neumann problem with distributional data. We exploit the layer potential theoretic method.

**Date:** December 19, 2024

**Time:** 20 : 00 local time in Tbilisi;

**(Compare to your local time:** [https://www.timeanddate.com/worldclock/georgia/tbilisi\);](https://www.timeanddate.com/worldclock/georgia/tbilisi)

## How to join:

The seminar is organized on the **Zoom Platform**. If you are already registered, you do not need to register again. Otherwise, to join the seminar please send an e-mail to [seminarim@ug.edu.ge](mailto:seminarim@ug.edu.ge) or register here:

<https://forms.gle/xfQJ9fg1uqe7CrZw6>

You will then receive further information.

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

## Organizers:

1. R. Duduchava, Institute of Mathematics, University of Georgia, Tbilisi
2. E. Shargorodsky, Department of Mathematics, King's College London
3. G. Tephnadze, Institute of Mathematics, University of Georgia, Tbilisi

## Secretary:

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

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