

Dear Colleagues!

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 March 7, 2023

Speaker: Jean Lagace, King's College London, UK; https://lagacejean.github.io

The title of the lecture: "Spectral Geometry on rough spaces"

Abstract: Spectral geometry is concerned with studying the spectrum (the eigenvalues) of differential operators (like the Laplacian) on surfaces and manifolds, and relating that spectrum with the geometry of the underlying space. Many tools, for instance pseudodifferential

calculus and microlocal analysis, have been developped over the years to study the spectrum when e veything is smooth. In this talk, I will focus on the asymptotic distribution of eigenvalues (Weyl's Law), and explain what we can keep when we do not assume smoothness of the underlying space. A special attention will be given to the Steklov problem.

This is joint work with Mikhail Karpukhin (University College London) and Iosif Polterovich (Université de Montréal).

Date: March 7, 2023 Time: 20 : 00 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 **Cisco Webex Meetings**. 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** 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

Technical support:

G. Tutberidze, Institute of Mathematics, University of Georgia, Tbilisi Z. Vashakidze, Institute of Mathematics, University of Georgia, Tbilisi



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