Tbilisi Analysis & PDE Seminar



Credit:

http://math.nw.ru/wp/wp-content/upload s/2014/11/grigorirozenblioum.jpg

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 Mondays at 16:00 GMT (at 17:00 CET, at 20:00 local time in Tbilisi).

Talk on October 25:

Speaker: Prof. **Grigori Rozenblioum**, Chalmers University of Technology and University of Gothenburg, Sweden; St. Petersburg State University and Leonhard Euler International Mathematical Institute in Saint Petersburg

https://www.chalmers.se/en/staff/Pages/grigori-rozenblioum.aspx

The title of the lecture: "Spectral properties of the Neumann-Poincare operator for the elasticity system and related questions about zero order pseudodifferential operators"

Abstract: The Neumann-Poincare operator is the double layer potential. Unlike the well-studied electrostatic problem where this operator is compact, the elasticity system is not compact. For the 3D homogeneous isotropic body with smooth boundary, this operator has an essential spectrum consisting of 3 points determined by Lame parameters. The eigenvalues of this operator may converge only to these points. We developed the machinery of spectral analysis of polynomially compact pseudodifferential operators and use it to find the asymptotics of these eigenvalues.

Date: October 25, 2021;

Time: 16:00 GMT (17:00 CET and 20:00 local time in Tbilisi);

How to join:

The seminar is organized on the <u>Cisco Webex Meetings</u>. If you are already registered, you do not need to register again. Otherwise, to join the seminar please send an e-mail to <u>seminarim@ug.edu.ge</u> 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-seminar

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:**
 - Z. Vashakidze, Institute of Mathematics, University of Georgia, Tbilisi

