



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 June 11, 2024

Speaker: Prof. Trunk Carsten, TU Ilmenau.

<https://www.researchgate.net/profile/Carsten-Trunk>

"Essential spectra of Sturm–Liouville operators and their indefinite counterpart"

Abstract: We show new perturbation results and invariance of essential spectra in terms of the real, locally integrable coefficients p , q , r for general Sturm-Liouville differential expressions of the form

$$\frac{1}{r} \left(-\frac{d}{dx} p \frac{d}{dx} + q \right)$$

with a.e. positive functions p and r . If one allows sign changes of the weight function r , then the situation changes dramatically but one keeps control over the essential spectrum and some properties of the isolated point spectrum can still be proved.

This talk is based on a joint works with J. Behrndt (Graz), G. Teschl (Vienna), and P. Schmitz (Ilmenau).

Date: June 11, 2024

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:

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3. G. Tephnadze, Institute of Mathematics, University of Georgia, Tbilisi

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