



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 February 20, 2024

Speaker: Prof. **Serena Federico**, University of Bologna;
<https://www.unibo.it/sitoweb/serena.federico2/cv-en>

"Weyl Calculus on graded groups"

Abstract: In this talk we will investigate the existence of a Weyl pseudo-differential calculus on any graded Lie group. To start with, we will recall the fundamental properties of the Weyl quantization in the Euclidean setting and of the corresponding pseudo-differential calculus. Afterwards, we will define a family of quantizations on any graded Lie group and develop the corresponding symbolic calculus. Finally, inside this family of quantizations we will identify a possible Weyl quantization on any graded group. In the end, we will see that the identified quantization is the uniquely determined Weyl quantization in the case of the

Heisenberg group.

This talk is based on a joint work with D. Rottensteiner and M. Ruzhansky.

Date: February 20, 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>

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