Tbilisi Analysis & PDE Seminar

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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).

Seminar on February 22:

Speaker: Prof. Paata Ivanishvili, North Carolina State University (NC), USA; https://sites.google.com/view/paata

The title of the lecture: "Rademacher type and Enflo Type Coincide"

Abstract: Pick any finite number of points in a Hilbert space. If they coincide with vertices of a parallelepiped then the sum of the squares of the lengths of its sides equals the sum of the squares of the lengths of the diagonals (parallelogram law). If the points are in a general position then we can define sides and diagonals by labeling these points via vertices of the discrete cube $\{0,1\}^n$. In this case the sum of the squares of diagonals is bounded by the sum of the squares of its sides no matter how you label the points and what n you choose. In a general Banach space we do not have parallelogram law. Back in 1978 Enflo asked: in an arbitrary Banach space if the sum of the squares of diagonals is bounded by the sum of the squares of its sides for all parallelepipeds (up to a universal constant), does the same estimate hold for any finite number of points (not necessarily vertices of the parallelepiped)? In the joint work with Ramon van Handel and Sasha Volberg we positively resolve Enflo's problem. Banach spaces satisfying the inequality with parallelepipeds are called of type 2 (Rademacher type 2), and Banach spaces satisfying the inequality for all points are called of Enflo type 2. In particular, we show that Rademacher type and enflo type coincide.

Date: February 22, 2021;

Time: 16:00 GMT (17:00 CET and 20:00 local time in 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-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:

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