



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 20 : 00 local time in Tbilisi.

Talk on April 25, 2022

Speaker: Prof. **Natasha Samko**, The Arctic University of Norway, Narvik, Norway;
<http://www.nsamko.com/>

The title of the lecture: “**Weighted boundedness of certain sublinear operators in generalized Morrey spaces on quasi-metric measure spaces under the growth condition**”

Abstract: We prove weighted boundedness of Calderón-Zygmund and maximal singular operators in generalized Morrey spaces on quasi-metric measure spaces, in general non-homogeneous, only under the growth condition on the measure, for a certain class of weights. Weights and characteristic of the spaces are independent of each other. Weighted boundedness of the maximal operator is also proved in the case when lower and upper Ahlfors exponents coincide with each other. Our approach is based on two important steps. The first is a certain transference theorem, where without using homogeneity of the space, we provide a condition which ensures that every sublinear operator with the size condition, bounded in Lebesgue space, is also bounded in generalized Morrey space. The second is a reduction theorem which reduces weighted boundedness of the considered sublinear operators to that of weighted Hardy operators and non-weighted boundedness of some special operators.

Date: April 25, 2022

Time: 20 : 00 local time in Tbilisi;

(Compare to your local time:

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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