International Seminar
"Operator Theory, Differential Equations and their Applications"

Seminar Chairmen: Prof. Anatoly G. Kusraev, Prof. Marat A. Pliev
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Integral properties of generalized potentials of Bessel type and Riesz type

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In our search discusses the general properties of potentials built based on weighted Lorentz spaces with common weights. Equivalent descriptions of cones of decreasing permutations are established for potentials constructed on the basis of weighted Lorentz spaces with common weights. Criteria for embeddings of the space of potentials into permutation invariant spaces are obtained and descriptions of optimal permutation invariant spaces for such embeddings are given. A concretization of these embeddings in the case of basic weighted Lorentz spaces is given. The results on modular inequalities for the considered Hardy-type operators are important, since such operators arise in the study of decreasing permutations for generalized Bessel and Riesz potentials, when the Orlicz-Lorentz spaces act as basic RIS. We consider modular inequalities for Hardy-type operators on the cone Ω of the operator positively decreasing functions from weighted Orlicz spaces.

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The seminar is organized by North Caucasus Center for Mathematical Research of the Vladikavkaz Scientific Center of the RAS jointly with Southern Mathematical Institute of the Vladikavkaz Scientific Center of the RAS.

If you have any questions please don't hesitate to contact the secretary of the seminar Batradz Tasoev at seminar_otde@mail.ru