



North Caucasus Center for Mathematical Research  
of the Vladikavkaz Scientific Center of the RAS  
Southern Mathematical Institute  
of the Vladikavkaz Scientific Center of the RAS



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

Seminar Chairmen: Prof. Anatoly G. Kusraev, Prof. Marat A. Pliev  
Seminar Secretary: PhD Batradz B. Tasoev

**March 23, 4 PM (UTC+3)**

On estimates of uniform moduli of continuity of potentials  
in the case of basic weighted Lorentz spaces.

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In our search considers the general properties of potentials constructed on the basis of weighted Lorentz spaces with general weights. Criteria for embedding the space of potentials into the Calderón space are constructed. A concretization of these embeddings is given in the case of basic weighted Lorentz spaces. Exact (in order) estimates for the uniform moduli of continuity of potentials are established in the case of embedding the space of potentials into the space of continuous bounded functions. Estimates for uniform moduli of continuity of potentials are described in the case of basic weighted Lorentz spaces. Necessary and sufficient conditions are established for the embedding of the space of potentials into the  $L_p$  space. The Localization condition for  $\gamma$ -means of the spectral expansion of the generalized Bessel potential is constructed in the case of basic weighted Lorentz 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](mailto:seminar_otde@mail.ru)