

INTERNATIONAL BIWEEKLY ONLINE SEMINAR ON ANALYSIS, DIFFERENTIAL EQUATIONS AND MATHEMATICAL PHYSICS

Coordinators: Prof. Alexey Karapetyants, Prof. Vladislav Kravchenko

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On smoothness of generalized eigenfunctions for differential-difference operators

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Unlike ordinary differential equations with constant coefficients, smoothness of generalized solutions to boundary value problems for neutral differential-difference equations on a finite interval $(0, d)$ can be violated and preserved only on some subintervals. However, for generalized eigenfunctions of differential-difference operators problem of smoothness remained open. In this lecture we obtain the necessary and sufficient conditions of smoothness for eigenfunctions of differential-difference operators.

*Seminar website: <https://msrn.sfedu.ru/sl>. The seminar uses Microsoft Teams online platform.
Please send questions to ademp.seminar@gmail.com (Tatiana Andreeva, scientific secretary).

The seminar is organized by the coordinators Alexey Karapetyants and Vladislav Kravchenko within the activities of the Regional Mathematical Center of the Southern Federal University in collaboration with Institute of Mathematics, Mechanics and Computer Sciences of the Southern Federal University and the OTHA research group in Operator Theory and Harmonic Analysis.



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