

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

Coordinators: Prof. Alexey Karapetyants, Prof. Vladislav Kravchenko

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15 September 2022, 6 pm (UTC+3)

Inverse Spectral Problems for Differential Operators

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The lecture will be devoted to inverse problems of spectral analysis for ordinary differential operators. Inverse spectral problems consist in recovering operators from their spectral characteristics. Such problems often appear in mathematics and have many applications in natural sciences. Inverse problems also play an important role in solving nonlinear evolution equations in mathematical physics.

The goal of the lecture is to present the main results in this area and describe the corresponding methods. We will pay the main attention to the so-called method of spectral mappings which is the most effective and universal tool for studying nonlinear inverse problems considered.

*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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