

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

Coordinators: Prof. Alexey Karapetyants, Prof. Vladislav Kravchenko

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5 October 2023, 6 pm (UTC+3)

The Landau Hamiltonian with delta-potentials supported on curves

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The spectral properties of a singularly perturbed self-adjoint Landau Hamiltonian in the plane with a delta-potential supported on a finite curve are studied.

After a general discussion of the qualitative spectral properties of the perturbed Landau Hamiltonian and its resolvent, one of our main objectives is a local spectral analysis near the Landau levels.

This talk is based on joint works with P. Exner, M. Holzmann, V. Lotoreichik, and G. Raikov.

*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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