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

Coordinators: Prof. Alexey Karapetyants, Prof. Vladislav Kravchenko

14 December 2023, 6 pm (UTC+3)

Orthogonal polynomials. Fourier series in orthogonal polynomials. Trace formula and asymptotics of Forsythe determinant.

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The following issues will be outlined:
1. Systems of polynomials $\{p_n(x)\}$ ($n \in \mathbb{Z}_+$) orthogonal to a measure and systems of Sobolev polynomials $\{\hat{q}_n(x)\}$ ($n \in \mathbb{Z}_+$).
2. Fourier series on systems $\{p_n(x)\}$ and $\{\hat{q}_n(x)\}$.
3. Trace formula and asymptotics of the Forsythe determinant.

*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.

Regional Mathematical Center
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Institute of Mathematics, Mechanics and Computer Sciences
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