

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

Coordinators: Prof. Alexey Karapetyants, Prof. Vladislav Kravchenko

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17 October 2024, 6 pm (UTC+3)

Weighted Approximations by Sampling-type Series

Tuncer Acar, Selcuk University, Turkey

tuncer.acar@selcuk.edu.tr

In this talk, we consider the approximation properties of generalized sampling type series and their exponential forms in weighted spaces of continuous functions and logarithmic weighted spaces of continuous functions, respectively. This type of problem (approximation in weighted spaces of functions) was considered for the first time in 1974 by Gadjiev for positive linear operators. Approximation by generalized sampling type series and their exponential forms in weighted spaces of functions were first considered by our research group in 2022. Published in 2022, our studies ‘T. Acar, O. Alagoz, A. Aral, D. Costarelli, M. Turgay, G. Vinti, Convergence of generalized sampling series in weighted spaces, Demonstratio Mathematica 55, 2022, 153-162’ and ‘A. Aral, T. Acar, S. Kursun, Generalized Kantorovich forms of exponential sampling series, Analysis and Mathematical Physics 12:50, 2022’ have been quite remarkable in this field. In this way, we have extended the class of approximated functions. In this talk, I will present these all recent results.

References:

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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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