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

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JOIN THE SEMINAR

16 May 2024, 6 pm (UTC+3)

Separation of solutions and the attractivity of fractional-order positive linear delay systems with variable coefficients

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This talk has two purposes. First, we study the separation of solutions to mixed-order positive linear delay systems with variable coefficients and the lower estimates of the separation of solutions to those systems. Second, we consider the global attractivity of fractional-order positive linear delay systems and describe precisely the rate of convergence of solutions to their equilibrium in some specific cases. To do this, the unified approach we use here is that the comparison principles have been modified to accommodate fractional-order delay systems. In addition, numerical simulations are introduced to illustrate the validity of the theoretical results. The talk is based on a joint works with Nguyen Dinh Cong and La Van Thinh.

*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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