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

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## Solvability and Mittag—Leffler stability analysis for time fractional partial differential equations

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We present a class of time fractional partial differential equations with Dirichlet boundary conditions. The main result shows the existence theorem of the proposed model using the Faedo–Galerkin method with some compactness arguments. Moreover, we prove the Mittag–Leffler stability of solutions of the considered model.

Keywords: fractional PDE, weak solution, Faedo-Galerkin method, Mittag-Leffler stability.

\*Seminar website: <a href="https://msrn.sfedu.ru/sl">https://msrn.sfedu.ru/sl</a>. 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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