

International scientific online seminar on Analysis, Differential Equations and Mathematical Physics

Coordinators: Prof. Alexey Karapetyants, Prof. Vladislav Kravchenko

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Can one hear the heat of a body? Mathematics of some novel techniques of medical imaging

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Medical imaging is known for producing wonderful mathematical problems involving all kinds of things from algebraic geometry to PDEs, to numerical analysis. The recent novel techniques have brought new mathematics. I will address briefly three (if the time permits) types of such mathematical problems coming from hybrid imaging, problems with internal data, and compton camera imaging.

No prior knowledge of the subject is assumed.

*Seminar website: <u>https://rmc.sfedu.ru/seminar</u>. The seminar uses Microsoft Teams online platform. To join the seminar, please send a request to <u>pichugina@sfedu.ru</u> (Olga Pichugina, scientific secretary).

The seminar is organized by 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 special Interest ISAAC-OTHA group in Operator Theory and Harmonic Analysis.

Региональный научно образовательный математический центр

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Special Interest ISAAC-OTHA group in Operator Theory and Harmonic Analysis <u>http://otha.sfedu.ru/isaac/</u>