

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

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Coordinators: Prof. Alexey Karapetyants, Prof. Vladislav Kravchenko

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**8 December 2022, 6 pm (UTC+3)**

On solutions of a multi-phase Stefan-Riemann problem

**Grigori Rozenblum**, Chalmers University of Technology, Sweden, The Euler International Mathematical Institute, Russia, and University of Science and Technology "Sirius", Russia

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We present a new method for finding eigenvalue asymptotics for polynomially compact, zero order, pseudodifferential operators. As an application we find asymptotics of the spectrum of the Neumann-Poincare (double layer potential) integral operator of the 3D linear elasticity. We find relations of the geometrical characteristics of surface and the spectrum of the NP operator.

\*Seminar website: <https://msrn.sfedu.ru/sl>. The seminar uses Microsoft Teams online platform. Please send questions to [ademp.seminar@gmail.com](mailto:ademp.seminar@gmail.com) (Tatiana Andreeva, scientific secretary).

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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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