

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

Coordinators: Prof. Alexey Karapetyants, Prof. Vladislav Kravchenko

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23 June 2022, 6 pm (UTC+3)

A Simple Wiener-Hopf factorization method for pricing options with barriers in Levy-driven models

Oleg Kudryavtsev, Russian Customs Academy, Southern Federal University, Russia,

koe@donrta.ru

The talk suggests a new approach to pricing options with barriers under pure non-Gaussian Levy processes. The key idea behind the method is to represent the process under consideration in short time intervals as consequent upward and downward movements. We use such a splitting rule to the Levy process at exponentially distributed randomized time points. Then we obtain the barrier option price by recurrent solving simple Wiener-Hopf equations.

*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 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.

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