International Journal of Mathematical Analysis 2014 vol.8 N49-52, pages 2507-2512

On a class of convolution equations in D'+ (R)

Salekhov L., Chebotareva E.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2014 Leonard Salekhov and Elvira Chebotareva. A class of equations containing complex integro-dierentiation oper- ators is considered by the distribution convolution algebra with supports on the nonnegative real axis. The issues of existence and uniqueness of solution by Fourier-Laplace transform method are researched.

http://dx.doi.org/10.12988/ijma.2014.410303

Keywords

Complex (fractal) integro-dierentiation operators δa ∀a ∈ C ultradistribution, Convolution group, Fourier-laplace transform, Space Z(C), Ultradistributions on C (analytic functionals)