

ABSTRACTS

Ahtyamov N.T., Musin I.Kh.

ON EXISTENCE OF A BASIS IN A WEIGHTED SPACE OF ENTIRE FUNCTIONS
Ahtyamov.pdf

Abstract. It is studied the problem of existence of a basis in a weighted space of entire functions.

Keywords: Entire functions, the Laplace transform of functionals, convex functions

Isaev K.P., Putintseva A.A., Yulmukhametov R.S.

THE REPRESENTATION BY EXPONENTIAL SERIES
IN WEIGHTED SPACES ON REAL AXIS
Isaev.pdf

Abstract. We consider the problem of representation by exponential series of functions from weighted Hilbert spaces on real interval.

Keywords: Hilbert spaces, exponential series, Fourier-Laplace transform, entire functions.

Kojevnikova L.M.

ON EXISTENCE AND UNIQUENESS OF SOLUTIONS OF THE DIRICHLET'S PROBLEM FOR
PSEUDODIFFERENTIAL ELLIPTIC EQUATIONS IN DOMAINS WITH NON-COMPACT
BOUNDARIES
Kojevnikova.pdf

Abstract. It is found a class of uniqueness of solutions of the Dirichlet's problem for pseudodifferential elliptic equations in domains with non-compact boundaries. The restriction on a growth of solutions is formulated in terms of geometric characteristics of unbounded domain Ω . They were introduced earlier in author's papers for quasi-elliptic equations. It is proved the existence of solution belonging to the class of uniqueness.

Keywords: pseudodifferential elliptic equations, Dirichlet's problem, class of uniqueness, unbounded domain, domain with non-compact boundaries, existence of solution, geometric characteristics.

Nasyrov F.S.

EXTENDED TANAKA FORMULA
Nasyrov.pdf

Abstract. Generalized Tanaka formula is proved for left-continuous predictable functions and for Wiener process.

Keywords: Wiener process, symmetric integral, extended symmetric integral, stochastic Stratonovich integral, stochastic Ito integral, Tanaka formula.

Khabibullin B.N.

COMPLETENESS OF EXPONENTIAL SYSTEMS IN SPACES OF FUNCTIONS
ON A RAY AND THE KORENBLUM–SEIP’S CHARACTERISTIC

Khabibullin.pdf

Abstract. Let $\{\lambda_k\}$ be a sequence of points in the right half-plane of the complex plane. We give sufficient conditions of completeness of the exponential system $\{e^{-\lambda_k x}\}$ in a weighted space of functions which are integrable on the positive semiaxis with a power weight in the terms of the Korenblum–Seip’s characteristic. The characteristic was arisen from a description of duistribution of zero sets for functions from uniform Bergman spaces in the unit disk.

Keywords: positive semiaxis, weighted space of integrable functions, exponential system, completeness, unit disk, Bergman space.