Olena Taras, Andriy Zagorodnyuk (Precarpathian National University, Ivano-Frankivsk, Ukraine)

Complex Homomorphisms on Algebras of Analytic Functions on the unit ball of ℓ_1

In [2], [3] was proposed a method of construction of some nontrivial complex homomorphisms (characters) on algebra of analytic functions of bounded type on a Banach space X, $H_b(X)$. In [1] this method is generalized for algebras of functions on a ball.

Using results in [1] and the natural convolution operation in ℓ_1 we introduce a convolution operation for characters of algebras of analytic functions on the unit ball of ℓ_1 and investigate its properties.

[1] Casanova V., García D., Maestre M. On the Zagorodnyuk method of constructing homomorphisms. Preprint.

[2] Zagorodnyuk A. *Spectra of algebras of entire functions on Banach spaces* // Proc. Amer. Math. Soc. — 2006. — **134**, 2559–2569.

[3] Zagorodnyuk A. *Spectra of algebras of analytic functions and polynomials on Banach spaces* // Contemporary Math. — 2007. — **435**, 381–394.