Algebra of block-symmetric analytic functions of bounded type

Kravtsiv V.V.
(Vasyl Stefanyk Precarpathian National University)
E-mail: maksymivvika@gmail.com

Let us denote by $\ell_1 \oplus \ell_\infty$ the space with elements $\begin{pmatrix} x \\ y \end{pmatrix} = \left(\begin{pmatrix} x_1 \\ y_1 \end{pmatrix}, \ldots, \begin{pmatrix} x_m \\ y_m \end{pmatrix}, \ldots \right)$, where $(x_1, x_2, \ldots, x_n, \ldots) \in \ell_1$, $(y_1, y_2, \ldots, y_n, \ldots) \in \ell_\infty$. The space $\ell_1 \oplus \ell_\infty$ with norm

$$||(x, y)||_{\ell_1 \oplus \ell_\infty} = \sum_{i=1}^{\infty} |x_i| + \sup_{i \geq 1} |y_i|$$

is a Banach space.

Let us denote by $\mathcal{H}_{bvs}(\ell_1 \oplus \ell_\infty)$ the algebra of block-symmetric analytic functions of bounded type on $\ell_1 \oplus \ell_\infty$ and $\mathcal{M}_{bvs}(\ell_1 \oplus \ell_\infty)$ — the spectrum of this algebra.

In this talk we will describe the spectrum of the algebra of block-symmetric analytic functions of bounded type on $\ell_1 \oplus \ell_\infty$ and we will show that the spectrum of the algebra of block-symmetric analytic functions of bounded type on $\ell_1 \oplus \ell_\infty$ does not coincide of point evaluation functionals.