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**Manuel Maestre\*** ([manuel.maestre@uv.es](mailto:manuel.maestre@uv.es)), Departamento de Analisis Matematico, Universidad de Valencia, Doctor Moliner, 50, 46100 Burjasot, Valencia, Spain. *Fibers of the spectra of Banach algebras of analytic functions on the ball of a Banach space.*

## Fibers of the spectra of Banach algebras of analytic functions on the ball of a Banach space

We report on joint work with R. M. Aron, D. Carando, T. W. Gamelin, and S. Lassalle.

We use the notation and terminology of the abstract of R. M. Aron.

It is clear that  $b \rightsquigarrow \delta_b$  defines an inclusion of  $B$  into  $\mathcal{M}(\mathcal{A})$ , where  $\delta_b \in \mathcal{M}(\mathcal{A})$  denotes evaluation at  $b$ . Further, for  $\varphi \in \mathcal{M}(\mathcal{A})$ , let  $\pi(\varphi) = \varphi|_{X^*}$ . Thus,  $\pi(\mathcal{M}(\mathcal{A})) \subset X^{**}$ . It is easy that  $\pi(\delta_b) = b$  for all  $b \in B$ . But it turns out that the range of  $\pi$  is the whole  $\overline{B^{**}}$ , the closed unit ball of  $X^{**}$ , the topological bidual of  $X$ .

We discuss recent work on fibers  $\pi^{-1}(b)$ , where  $b \in \overline{B^{**}}$ . Unlike the classical situation, fibers  $\pi^{-1}(b)$  over points of  $\overline{B^{**}}$  can be trivial for boundary points  $b$  while having a rich structure and large cardinality over interior points. (Received January 25, 2011)