THE FREMLIN TENSOR PRODUCT AND HOLOMORPHIC FUNCTIONS ON COMPLEX BANACH LATTICES

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ABSTRACT. Just as the projective tensor product linearizes the bounded bilinear forms on a product of Banach spaces, so the Fremlin tensor product (1974) for Banach lattices linearizes the regular bilinear forms. Bu and Buskes (2012) extended this to a symmetric n-fold tensor product that linearizes the regular n-homogeneous polynomials on a Banach lattice. We examine Fremlina's construcion and we show how it can be used to identify some geometric properties of the domain of convergence of a power series on a complex Banach lattice.

(Joint work with Chris Boyd and Nina Snigireva.)