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(a.sola@statslab.cam.ac.uk), Center for Mathematical Sciences, University of Cambridge, Cambridge, CB3 0WB, United Kingdom. *Cyclicity in Dirichlet-type spaces on the bidisk via extremal polynomials.*

Extending recent work by the authors on Dirichlet-type spaces in the unit disk to the two-dimensional setting, we study functions that are cyclic with respect to the operators induced by multiplication by the coordinate functions. For certain subclasses of functions in such spaces, we identify near-optimal approximating polynomials, determine sharp rates of cyclicity, and study simple cyclic and non-cyclic examples in detail. (Received January 08, 2014)