1154-46-488 Meredith Sargent\* (sargent@uark.edu) and Alan Sola. Old Results and New Observations for Optimal Approximants on the Bidisk.

In recent years, optimal polynomial approximants have been used to study cyclicity of functions in Dirichlet-type spaces on the complex unit disk, with particular interest being paid to the connection between the location of the zero sets of the optimal approximants and cyclicity, as well as a correspondence between optimal approximants and orthogonal polynomials. Some progress has been made to extend these ideas to the bidisk, where this question was also studied by electrical engineers for polynomials in the Hardy space. In this talk, the engineering results are reviewed, and new observations regarding zero sets and cyclic functions are discussed. (Received September 05, 2019)