

1065-47-105

Greg Knese* (geknese@bama.ua.edu), University of Alabama, Department of Mathematics, Box 870350, Tuscaloosa, AL 35487-0350. *Rational inner functions in the Schur-Agler class.*

The Schur-Agler class is a subclass of the bounded analytic functions on the polydisk with close ties to operator theory. We shall describe our recent investigations into the properties of rational inner functions in this class. Non-minimality of transfer function realization, necessary and sufficient conditions for membership (in special cases), and low degree examples are among the topics we will discuss. (Received September 07, 2010)