

1163-46-143

Raymond Cheng* (rcheng@odu.edu), Department of Mathematics and Statistics, Old Dominion University, 4700 Elkhorn Avenue, Norfolk, VA 23529. *Inner functions, zero sets, and reproducing kernel spaces.*

By comparison with the familiar shift operator on the Hardy space H^2 , we will ponder what it could mean for a vector to be "inner" with respect to an arbitrary operator on a Hilbert space. We'll look at some things we can do with this concept (e.g., describe zero sets of reproducing kernel spaces), and some things we cannot do (e.g., insist on a canonical factorization). Joint work with J. Mashreghi and W. Ross. (Received August 21, 2020)