1039-32-42 **Greg Knese*** (gknese@uci.edu), University of California, Irvine, Department of Mathematics, 103 MSTB, Irvine, CA 92697-3875. Stable polynomials and distinguished varieties.

The zero sets of two variable polynomials can interact in various ways with the two dimensional torus in \mathbb{C}^2 . We will explore the relationship between polynomials with no zeros on the closed bidisk and distinguished varieties (plane curves that exit the bidisk through the distinguished boundary). As an application, we can reprove and provide some extra details to a known representation theorem for distinguished varieties. All of these topics are closely related to inner functions and Pick interpolation on the bidisk. (Received February 26, 2008)