1070-46-220 **Alexander J. Izzo*** (aizzo@math.bgsu.edu). *Function algebras invariant under every self-homeomorphism.* Preliminary report.

We will present results concerning function algebras invariant under group actions inspired by a question raised by Ronald Douglas in connection with his work on a conjecture in operator theory due to William Arveson. In particular, we will answer, in suitably generalized form, the following question which could be posed in a beginning analysis course: If A is a uniformly closed algebra of continuous complex-valued functions on a closed ball in Euclidean space such that A contains the constants and separates points, and if for each self-homeomorphism h of the closed ball and each function f in A the composite function $f \circ h$ is also in A, must then A contain every continuous complex-valued function on the closed ball? (Received February 12, 2011)