Meeting: 1003, Atlanta, Georgia, KRANTZ, MAA Invited Address

1003-A0-13 Steven G. Krantz* (sk@math.wustl.edu), Department of Mathematics, Campus Box 1146, Washington University, One Brookings Drive, St. Louis, MO 63130. Symmetry in Complex Analysis.

We consider the notion of symmetry in complex analysis of one and several variables. Symmetry manifests itself in many forms, but one of the most useful measures of symmetry is the so-called automorphism group. This is a topological group of analytic symmetries of the domain.

We shall examine how algebraic and topological properties of the automorphism group affect the geometry of the domain and vice versa. Examples from one and several complex variables will be provided. (Received June 10, 2004)