1063-53-160   **Robert E. Greene*** (`greene@math.ucla.edu`), Department of Mathematics, UCLA, Los Angeles, CA 90095-1555. *Semi-continuity of Isometry and Automorphism Groups(joint work with K.T. Kim and S.G. Krantz).*

Symmetry of geometric objects can be diminished or eliminated by arbitrarily small perturbations, but increasing the amount of symmetry requires alteration of a definite size. This intuitive perception of the semi-continuity of symmetry groups can be given precise meaning in many cases. In this talk, we discuss a new proof of D. Ebin's well-known result on the semi-continuity of isometry groups of Riemannian metrics and present applications to the semi-continuity of automorphism groups of domains in complex euclidean spaces and complex manifolds in general(joint with K.T.Kim and S.G.Krantz) (Received August 15, 2010)