

Meeting: 1003, Atlanta, Georgia, SS 33A, AMS Special Session on Topics in Geometric Function Theory, I

1003-30-1490 **William E. Hornor*** (w11mhrnr@netscape.net), Department of Mathematics, University of Southern Mississippi, Hattiesburg, MS 39406. *Iteration models and invariant measures for holomorphic self-maps of the unit disc.* Preliminary report.

Univalent self-maps of the unit disc with a fixed point are biholomorphically equivalent to rotations of planar sets, and studying these self-maps by examining their rotation models has proved to be fruitful. Self-maps without fixed points can be modeled as translations in the plane. We construct a translation model for maps with fixed a fixed point and investigate the existence of measures invariant with respect to a given self-map. (Received October 05, 2004)