1025-32-80Michael D Bolt* (mbolt@calvin.edu), Department of Mathematics and Statistics, 1740Knollcrest Circle SE, Grand Rapids, MI 49546. Möbius geometry of hypersurfaces.

We identify the curvature invariants for a real hypersurface in \mathbb{C}^n under the action of the Möbius group. The Levi form captures that part of the second fundamental form that is invariant under biholomorphism. Under Mobius transformations, the skew-hermitian part of the second fundamental form is invariant as well. Finally, we characterize those hypersurfaces for which the skew-hermitian part of the second fundamental form is zero. (Received January 15, 2007)