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Daniel M Look* (dlook@stlawu.edu), SLU Dept of Mathematics, 23 Romoda Drive, Canton, NY 13617. *The Dynamics of Two Circle Inversions.*

Previous results demonstrate a large amount of dynamical variability within the family of n -circle inversions with $n > 2$ when complex radii are allowed. We will concentrate on the anti-holomorphic family of maps

$$z \mapsto \frac{r^2 \bar{z}}{\bar{z}^2 - 1}$$

that arise from a particular 2-circle inversion.

The dynamics possible for this family differ in many ways from the $n > 2$ case; in particular, for $n = 2$ we see the appearance of parameter values for which the Julia set is the entire Riemann sphere. We show that this family does not allow Herman rings and use this to discuss the topology of the connectedness locus. (Received September 13, 2017)