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Cristina Ballantine\* (cballant@holycross.edu), Department of Mathematics and Comp. Science, College of the Holy Cross, Worcester, MA 01610, and Dorin Ghisa. Blaschke Product Mappings: Visualization and Automorphic Properties.

Blaschke products are obtained by multiplying particular Möbius transformations. A visualization of Blaschke product mappings can be obtained by treating them as canonical projections of covering Riemann surfaces and finding fundamental domains and covering transformations corresponding to these surfaces. The mappings are automorphic with respect to the group of covering transformations. We use a technique similar to domain coloring to display the fundamental domains and mapping properties of Blaschke products. If time permits, we will discuss similar properties for general rational functions. (Received March 02, 2009)