1165-39-118 **E. Cabral Balreira*** (ebalreir@trinity.edu) and **Rafael Luis**. *Geometry and Global Stability of 2D Periodic Monotone Maps.*

We establish conditions to ensure global stability of a competitive periodic system from hypotheses on individual maps. We study planar competitive maps of Kolgomorov type. We show how conditions for global stability for individual maps will remain invariant under composition and hence establish a globally stable cycle. Our main theoretical contribution is to show that stability for monotone non-autonomous periodic maps can be reduced to a problem of global injectivity. We provide analytic conditions that can be checked and illustrate our results with important competition models such as the planar Leslie-Gower, Ricker, and Logistic maps. (Received January 15, 2021)