1006-37-31 **James T Rogers, Jr.\*** (`jim@math.tulane.edu`), Department of Mathematics, Tulane University, New Orleans, LA 70118. *Siegel Disks Whose Boundaries Have Only Two Complementary Domains.*

Let $f$ be a rational map of the Riemann sphere of degree at least two. Suppose $f$ has a Siegel disk $G$ such that the boundary of $G$ has exactly two complementary domains. We prove that if the rotation number of $G$ satisfies a diophantine condition, then the boundary of $G$ contains a critical point. (Received January 12, 2005)