1086-37-600 **Scott R. Kaschner***, 1138 Canterbury Square South, Indianapolis, IN 46260, and **Roland K. W. Roeder**. *Superstable Manifolds of Invariant Circles and Co-dimension 1 Böttcher Functions.*

Let $f : X \dashrightarrow X$ be a dominant meromorphic self-map, where X is a compact connected Hermitian manifold of dimension $n > 1$. Suppose there is an embedded copy of $\mathbb{P}^1$ that is invariant under f, with f holomorphic and transversally superattracting with degree a in some neighborhood. Suppose also that f restricted to this line is given by $z \to z^b$, with resulting invariant circle S. The regularity of the local stable manifold $\mathcal{W}^s_{\text{loc}}(S)$ is dependent on a and b. Specifically, I will show that when $a \geq b$, $\mathcal{W}^s_{\text{loc}}(S)$ is real analytic, and the condition $a \geq b$ cannot be relaxed without adding additional hypotheses. (Received September 08, 2012)