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Rebecca G. Wahl* (rwahl@butler.edu), Butler University, 4600 Sunset Ave., Indianapolis, IN 46208-3485. *An Invariant Subspace for Some Composition Operators on $H^2(D)$* . Preliminary report.

If φ is an analytic map of the unit disk D into itself, the composition operator C_φ on the Hardy space $H^2(D)$ is defined by $C_\varphi(f) = f \circ \varphi$. For composition operators C_φ , where φ is a map of the unit disk into itself having fixed point 1 with $\varphi'(1) \leq 1$, we show that for all $r \geq 0$, $e^{r \frac{z+1}{z-1}} H^2(D)$ is an invariant subspace of $H^2(D)$ for C_φ .

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