1056-Z1-643   **Katherine Heller*** (`kheller@virginia.edu`), Department of Mathematics, P.O. Box 400137, University of Virginia, Charlottesville, VA 22904-4137. *Composition Operators on $S^2(\mathbb{D})$.*

Given $\varphi : \mathbb{D} \to \mathbb{D}$, an analytic map of the unit disc in $\mathbb{C}$, the composition operator C_φ is defined by $C_\varphi(f) = f \circ \varphi$ for f belonging to some Hilbert space of analytic functions on $\mathbb{D}$. In this talk, we will discuss properties of linear-fractionally induced composition operators and their adjoints on the Hilbert space of functions whose derivative is in the Hardy space, $H^2(\mathbb{D})$. (Received September 15, 2009)