1065-47-149 **Thomas L. Kriete*** (tlk8q@virginia.edu), Department of Mathematics, Kerchof Hall, P. O. Box 400137, Charlottesville, VA 22904-4137, and **Barbara D. MacCluer**. *Distance in the Calkin algebra between composition operators.* Preliminary report.

For a pair of sufficiently nice analytic self-maps φ and ψ of the unit disk (e.g. analytic across the entire unit circle but not finite Blaschke products) having the same angular derivative points on the unit circle, the pseudohyperbolic distance $\rho(e^{i\theta})$ between $\varphi(e^{i\theta})$ and $\psi(e^{i\theta})$ extends continuously to the set F of common angular derivative points. In this situation it is known that the difference of the associated composition operators C_φ and C_ψ is compact on H^2 if and only if the extended ρ vanishes identically on F. This talk will discuss estimates involving ρ for the essential norm of $C_\varphi - C_\psi$ when the difference is not compact. (Received September 13, 2010)