1077-47-380 **Sivaram K. Narayan*** (sivaram.narayan@cmich.edu), Department of Mathematics, Pearce Hall 218, Central Michigan University, Mount Pleasant, MI 48859. *Commutators of composition operators with adjoints of composition operators on weighted Bergman spaces.*

For linear-fractional self-maps φ and ψ of the unit disc $\mathbb{D}$, where at least one of φ and ψ is a non-automorphism, we show that the commutator $[C_\psi^*, C_\varphi]$ is non-trivially compact on the weighted Bergman space $A^2_\alpha(\mathbb{D})$ if and only if either φ and ψ are both parabolic or φ and ψ are both hyperbolic, with associated conclusions about their fixed points in each case. In the automorphism case, we show that the commutator $[C_\psi^*, C_\varphi]$ is compact if and only if both φ and ψ are rotations. This is a joint work with Barbara MacCluer and Rachel Weir. (Received August 27, 2011)