1116-14-2596 **Cris Negron*** (cnegron@lsu.edu). *Morita equivalences of Azumaya algebras as sheaves of bimodules.* Preliminary report.

Given a sheaf of Azumaya algebras A on a quasi-compact and quasi-separated scheme X, I will discuss how a certain class of autoequivalences of the category of quasi-coherent sheaves of A-modules $\mathrm{Qcoh}A$ are in bijection with sheaves of invertible A-bimodules. As a consequence of this fact, as well as Antieau/Rosenberg's reconstruction theorem, we (a) understand the group of autoequivalences of $\mathrm{Qcoh}A$ as an extension of the stabilizer of the Brauer class of A under the natural action of $\mathrm{Aut}(X)$ and the Picard group of X, and (b) realize any autoequivalence of $\mathrm{Qcoh}(A)$ as pullback along an automorphism of the gerbe associated to A. I will explain how this work fits in with the many results relating invariants of A to those of the underlying scheme X. (Received September 22, 2015)