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Bhanumati Dasgupta* (bhanumati@msn.com) and **Soura Dasgupta**. *A simple hermitian analogue of the Morita theorems*. Preliminary report.

The two Morita theorems state that a functor between categories of modules over algebras (CMAs) is an equivalence iff it is given by a single object P where this object with connecting maps forms a Morita context. Frohlich et al generalized it partially for algebras with involutions. Algebras with anti-structures include algebras with involutions. Our theorem claims that a functor between categories of modules with hermitian forms over algebras with antistructure, which agrees with an equivalence between the underlying CMAs on the underlying modules and morphisms, is an equivalence implies it is given by a single object (P, Φ) where P is a module and Φ is a non-singular form where this object with connecting maps forms a hermitian Morita context. The converse is Hahn's hermitian analogue of Morita I while ours is a simple hermitian analog of Morita II. It has been an open question since 1985, despite several attempts to solve it. E.g. Verhaege et al, Hernandez. This theorem is important because all such equivalences preserve non-singular, split and hyperbolic modules, give rise to isomorphic Witt groups of the underlying rings, and induce generalized Brauer groups and Azumaya algebras with antistructure (Received September 23, 2017)