1056-16-520        **Paul Frank Baum\*** (`baum@math.psu.edu`), Mathematics Department, Pennsylvania State University, University Park, PA 16802. *Morita Equivalence Revisited.*

MORITA EQUIVALENCE REVISITED

k denotes the coordinate algebra of a complex affine variety. A k-algebra is an algebra A over the complex numbers which is a k-module such that the algebra structure and the k-module structure are compatible in the evident way. Note that A is not required to be commutative. Prim(A) denotes the set of primitive ideals in A. Prim(A) is topologized by the Jacobson topology. This talk studies an equivalence relation between k-algebras which is a weakening of Morita equivalence. If A and B are equivalent in the new equivalence relation, then A and B have isomorphic periodic cyclic homology, and Prim(A) is in bijection with Prim(B). However, the bijection between Prim(A) and Prim(B) might not be a homeomorphism. Thus the new equivalence relation permits a tearing apart of strata in the primitive ideal spaces which is not allowed by Morita equvalence. An application to the representation theory of reductive p-adic groups will be outlined.

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