Calder Daenzer* (cdaenzer@math.upenn.edu), Department of Mathematics, 209 South 33rd St., Philadelphia, PA 19104-6395. On applications of Mackey imprimitivity for gerbes. Preliminary report.

We present a Mackey type imprimitivity theorem for families of locally compact groups "parametrized" by groupoids. We also study versions of this theorem for deformed versions of the family of groups.

A simple application of this leads to the definition of noncommutative classifying spaces. Another application leads to a clean proof and generalization of T-duality. (Received September 26, 2006)