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Abelian cocycles for nonsingular ergodic transformations and the genericity of type III_1 transformations. (English) Zbl 0623.58010

Monatsh. Math. 103, 187-205 (1987).

The authors prove that in the space of nonsingular transformations of a Lebesgue probability space the type III_1 ergodic transformations form a dense G_δ set with respect to the coarse topology. They also prove that for any locally compact second countable abelian group H, and any ergodic type III transformation T, it is generic in the space of H-valued cocycles for the integer action given by T that the skew product of T with the cocycle is orbit equivalent to T. Similar results are given for ergodic measure-preserving transformations as well.

MSC:

37A99 Ergodic theory

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