

Horadam, K. J.

The shift action on 2-cocycles. (English) Zbl 1043.20026
J. Pure Appl. Algebra 188, No. 1-3, 127-143 (2004).

This paper is a very interesting one at least for the applications concerning representation theory, combinatorial design and quantum dynamics. Introducing shift actions from a group G on the group of 2-cocycles from G to an Abelian group C , there are obtained stronger equivalence relations than does cohomology. In the last section there is also given a very nice application to digital signal design.

Reviewer: [Viorel Mihai Gontineac \(Iași\)](#)

MSC:

[20J06](#) Cohomology of groups

[20B25](#) Finite automorphism groups of algebraic, geometric, or combinatorial structures

[94A60](#) Cryptography

Cited in **1** Review
Cited in **2** Documents

Keywords:

actions on sets; 2-cocycles; group extensions; representation theory; shift actions; groups of automorphisms; fixed points; orbits; stabilisers; coboundaries; differentially uniform cocycles

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