

Andersen, Brooke M.; Kach, Asher M.; Melnikov, Alexander G.; Solomon, Reed
Jump degrees of torsion-free abelian groups. (English) Zbl 1273.03142
J. Symb. Log. 77, No. 4, 1067-1100 (2012).

Summary: We show, for each computable ordinal α and degree $\mathbf{a} > \mathbf{0}^{(\alpha)}$, the existence of a torsion-free abelian group with proper α^{th} jump degree \mathbf{a} .

MSC:

03D45 Theory of numerations, effectively presented structures
20K15 Torsion-free groups, finite rank
20K20 Torsion-free groups, infinite rank

Cited in **5** Documents

Keywords:

torsion-free abelian group; jump degree

Full Text: [DOI](#) [Euclid](#)

References:

- [1] DOI: 10.1112/S0024610700001459 · Zbl 1023.03036 · doi:10.1112/S0024610700001459
- [2] DOI: 10.1016/j.jalgebra.2008.06.007 · Zbl 1156.03042 · doi:10.1016/j.jalgebra.2008.06.007
- [3] DOI: 10.1090/S0002-9947-1990-0955487-0 · doi:10.1090/S0002-9947-1990-0955487-0
- [4] DOI: 10.1305/ndjfl/1039293061 · Zbl 0973.03076 · doi:10.1305/ndjfl/1039293061
- [5] DOI: 10.1007/BFb0090954 · doi:10.1007/BFb0090954
- [6] Degrees of structures 46 pp 723– (1981)
- [7] DOI: 10.1007/s00224-009-9175-9 · Zbl 1204.03039 · doi:10.1007/s00224-009-9175-9
- [8] Degrees coded in jumps of orderings 51 pp 1034– (1986) · Zbl 0633.03038
- [9] Boolean algebras, Stone spaces, and the iterated Turing jump 59 pp 1121– (1994) · Zbl 0819.03034
- [10] DOI: 10.1016/0168-0072(91)90038-N · Zbl 0734.03026 · doi:10.1016/0168-0072(91)90038-N
- [11] DOI: 10.4064/fm175-3-2 · Zbl 1021.03042 · doi:10.4064/fm175-3-2
- [12] Infinite abelian groups. Vol. I 36 (1970)
- [13] Infinite abelian groups. Vol. II 36 (1973)
- [14] DOI: 10.1016/0168-0072(83)90012-X · Zbl 0575.03038 · doi:10.1016/0168-0072(83)90012-X
- [15] Complexity, logic, and recursion theory 187 pp 157– (1997)
- [16] Proceedings of the American Mathematical Society 114 pp 545– (1992)
- [17] Computable structures and the hyperarithmetical hierarchy 144 (2000) · Zbl 0960.03001

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.