

Corrections to

ABELIAN GROUPS QUASI-PROJECTIVE OVER
THEIR ENDOMORPHISM RINGS II

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1. The synopsis is incorrect and should read as follows: Let R be a commutative ring with 1 and X an R -module. Then $M = X \oplus R$ is quasi-projective as an E -module, where $E = \text{Hom}_R(M, M)$. In this note it is shown that any torsion free abelian group G of finite rank, quasi-projective over its endomorphism ring, is, up to quasi-isomorphism, a direct sum of fully invariant subgroups of the form $M = X \oplus R$, where R is an integrally closed full subring of an algebraic number field, X is an R module, and $\text{Hom}_Z(M, M) = \text{Hom}_R(M, M)$.

2. In the notation preceding Lemma 2, J_i should denote the *nil* radical of E_i .

3. The proof of Proposition 4-Corollary 5, can be greatly simplified. By considering

$$G/EG_1 \cap E\left(\bigoplus_{i=2}^n G_i\right) \cong \left[EG_1/EG_1 \cap E\left(\bigoplus_{i=2}^n G_i\right) \right] \\ \oplus \left[E\left(\bigoplus_{i=2}^n G_i\right) / EG_1 \cap E\left(\bigoplus_{i=2}^n G_i\right) \right]$$

and using Lemma 2 to show projections can't lift, it follows that either G/EG_1 or $G/E(\bigoplus_{i=2}^n G_i)$ is bounded. In the latter case, repeat the procedure on $G/EG_2 \cap E(\bigoplus_{i=3}^n G_i)$, etc. It follows directly that G/EG_i is bounded for some i .

4. The proof of Proposition 10 is incorrect. However, a result of Beaumont and Pierce in [1] can be used to write E_0 quasi-isomorphic to $S \oplus J_0$ where S is an integral domain. From this point on, the proof of Proposition 10 works.

5. Theorem 11 should read as follows.

If G is a torsion free abelian group of finite rank, then G is $aEqp$ if and only if G is quasi-isomorphic to a group of the form $H = \bigoplus_{i=1}^m M_i$ where, for each i , $M_i = R_i \oplus X_i$ is fully invariant in H , R_i is a full subring of an algebraic number field (which can be assumed Dedekind), X_i is an R_i -module, and $\text{Hom}_Z(M_i, M_i) = \text{Hom}_{R_i}(M_i, M_i)$. The last condition is the only change, and follows immediately from the discussion preceding Theorem 11, where it is shown that R_i is contained in the center of $\text{Hom}_Z(M_i, M_i)$.