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ERRATUM TO "A MODULE-THEORETIC APPROACH TO ABELIAN AUTOMORPHISM GROUPS", ISRAEL JOURNAL OF MATHEMATICS **205** (2015), 235–246

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Manoj K. Yadav and Rahul D. Kitture have kindly called our attention to the fact that the results of Sections 5 and 6 of [Car15] do not hold as stated. Yadav and Kitture have constructed counterexamples for both cases [YK16]. The examples show that the argument on page 243 starting with "Consider the embedding…" does not stand, and the same holds for the argument on page 244 starting with "As in the previous section…". In fact, the equation

$$v^{\alpha} f = (vf)^{\hat{\alpha}}$$

that we used to show that $\alpha = 1$ is incorrect and should be replaced by

$$v^{\alpha} f + v\lambda = (vf)^{\hat{\alpha}}.$$

Yadav and Kitture show that valid results can be obtained by specifying further conditions on the central products that are used in Sections 5 and 6. They prove in particular the following

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Theorem: [YK16, Theorem C] *Let H be a special p-group such that $H^p < H'$, and the p-th power map*

$$H/H' \to H^p$$
$$xH' \mapsto x^p$$

is injective.

Let $M \leq H'$ be a subgroup of order p such that $M \not\leq H^p$.

Let z be an element of order p^2, and let $G = H\langle z \rangle$ be a central product, such that $z^p \in M$.

If both H and H/M have an abelian automorphism group, then the same holds for G.

References

[Car15] A. Caranti, *A module-theoretic approach to abelian automorphism groups*, Israel J. Math. **205** (2015), no. 1, 235–246. MR 3314589

[YK16] M. K. Yadav and R. D. Kitture, *Note on Caranti's method of construction of Miller groups*, 2016, arXiv:math.GR/1607.02247.