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**Title:**

**Erratum: Applications of epi-retractable and co-epi-retractable modules**

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## ERRATUM: APPLICATIONS OF EPI-RETRACTABLE AND CO-EPI-RETRACTABLE MODULES

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(Communicated by Bernhard Keller)

Proposition 2.11 of [1] holds with the retractable condition on  $M$ . Consequently, Corollary 2.12 of [1] holds for any ring  $R$ . Hence the statement “Let  $R$  be a pli ring” in [1, Corollary 2.12] can be replaced by “Let  $R$  be any ring”.

Moreover, part (2) of [2, Proposition 3.1] which was used in the proof of [1, Proposition 3.17] is clearly incorrect. To see this, it is enough to get  $R = \mathbb{Z}$ . Therefore, condition (b) of [1, Proposition 3.17] must be omitted. Hence [1, Proposition 3.17] should be replaced as follows:

**Proposition 3.17.** *Let  $M$  be a projective module over a left hereditary ring  $R$ . Then the following statements are equivalent:*

- (a)  $M$  is semisimple;
- (b)  $M$  is co-epi-retractable;
- (c) In  $\sigma[M]$  every injective module is epi-retractable.

Also, [1, Corollary 3.18] is changed as follows:

**Corollary 3.18.** *Let  $R$  be a left hereditary ring. Then the following statements are equivalent:*

- (a)  $R$  is a semisimple ring;
- (b)  $R$  is a co-pli ring;
- (c) Every injective  $R$ -module is epi-retractable;
- (d) Every  $R$ -module is co-epi-retractable.

According to the above corollary, in page 2 of [1], the conditions (b) and (e) should be removed.

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