

# Reply to “Corrections on Cooperative Communications Using Reliability-Forwarding Relays”

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We thank the authors of [1] for correcting the errors of our paper [2]. Here, we would like to emphasize that the corrections do not affect the main results obtained by the study in our paper, which are stated in Propositions 1 and 2 (see [2]). That is, QRR outperforms the regular DF scheme in terms of the deflection coefficient. Indeed, based on the corrected results, it can be proved that our proposed QRR scheme can actually be applied more widely. Specifically, condition (19) given in Proposition 1 (see [2]) should be replaced by a more general form given by

$$p'(0) > -\frac{1}{4} - \frac{p(0)}{2},$$

which means that the result stated in Proposition 1 actually holds for all channel SNR, and therefore, Corollaries 1 and 2 in [2] are not required anymore.

We have also evaluated the performance of QRR again. The results indicate the QRR performance obtained by using the updated  $\alpha_{\text{MDC},i}$  and  $d_{\text{def,max}}^2$  is only slightly different than that via using the old  $\alpha_{\text{MDC},i}$  and  $d_{\text{def,max}}^2$ , and all the trends of the curves are the same as those provided in our paper.

## REFERENCES

- [1] U. Aygolu and E. Basar, “Corrections on “Cooperative communications using reliability-forwarding relays,”” *IEEE Trans. Commun.*, to appear.
- [2] T.-Y. Wang and J.-Y. Wu, “Cooperative communications using reliability-forwarding relays,” *IEEE Trans. Commun.*, vol. 61, no. 5, pp. 1776–1785, May 2013.

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