

Comments and Corrections

Corrections to “MIMO-LoRa for High-Data-Rate IoT: Concept and Precoding Design”

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WE HAVE found a few typos in [1, eqs. (10) and (13)]. The corrections for these equations are given as follows:

$$\text{subject to } \sum_{i=1}^r \gamma_i \leq \alpha, \quad \gamma_1 \leq \beta \quad (10)$$

$$\mathbf{F} = [\mathbf{U} \quad \mathbf{0}] \text{diag}(\sqrt{\gamma_1}, \dots, \sqrt{\gamma_m}, 0, \dots, 0). \quad (13)$$

Note that the updated equations (10) and (13) do not affect any other equations and results in [1].

In addition, in [1], there is a missing citation of the reference [2] due to the space limit, which should appear in the sentence

below eq. (10) as follows: “Using the Lagrange multiplier method, it can be shown that the solution to problem (P2) is given by [2]”.

REFERENCE

- [1] J.-M. Kang, “MIMO-LoRa for high-data-rate IoT: Concept and precoding design,” *IEEE Internet Things J.*, vol. 9, no. 12, pp. 10368–10369, Jun. 2022.
- [2] P. Stoica and G. Ganesan, “Maximum-SNR spatial-temporal formatting designs for MIMO channels,” *IEEE Trans. Signal Process.*, vol. 50, no. 12, pp. 3036–3042, Dec. 2002.

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