Erratum: Generalized quantum process discrimination problems [Phys. Rev. A **103, 062606 (2021)]**

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Page 4, the second line of Eq. (5) should read “ $C_G := \text{Pos}_{\tilde{V}}^M$.”

Page 11, Example 13, the last sentence (which starts with “Thus, it is easily seen”) should read “Thus, it is easily seen from Example 11 that this problem is $\mathcal{H}^T$ symmetric if $\Phi^{(g)}$ belongs to C_G for any $\Phi \in C_G$.”

Page 17, Sec. VI A 1, the second sentence of the first paragraph (which starts with “We recall that”) should read “Assume that $\Phi^{(g)} \in C_G$ ($\forall \Phi \in C_G$) holds; then, this problem is $\mathcal{H}^T$ symmetric.”

Page 17, Sec. VI A 1, the third and fourth sentences of the second paragraph (which starts with “Assume that a collection of channels”) should read “Assume that a collection of channels $\{\hat{\Lambda}_r\}_{r=0}^{R-1}$ is teleportation covariant, i.e., there exists a projective unitary representation $h \mapsto U_h$ such that

$$\hat{\Lambda}_r = \text{Ad}_{U_h} \circ \hat{\Lambda}_r \circ \text{Ad}_{U_h^\dagger}, \quad \forall r \in \mathcal{I}_R, h \in \mathcal{H}.$$

It is easily seen that $\Phi^{(g)} \in C_G$ ($\forall \Phi \in C_G$) holds and $h \mapsto \tilde{U}_h$ ($h \in \mathcal{H}$) is irreducible, and thus there exists a tester with maximally entangled pure states that is optimal.”

Page 17, Sec. VI A 1, the first sentence of the third paragraph (which starts with “The second example is”) should read “The second example is the case in which $T = 1$ holds and $\hat{\Lambda}_0, \dots, \hat{\Lambda}_{R-1} \in \text{Chn}(V, W)$ are unital qubit channels, i.e., unital channels with $N_V = N_W = 2$.”

Page 17, Sec. VI A 1, the last sentence of the third paragraph (which starts with “It follows that”) should read “It follows that $\Phi^{(g)} \in C_G$ ($\forall \Phi \in C_G$) holds and the representation $h \mapsto U_h$ is irreducible, and thus there exists a tester with maximally entangled pure states that is optimal.”