On the Frame Error Rate of Transmission Schemes on Quasi-Static Fading Channels:

ERRATUM

As explained in Section V of our original paper, if the frame error rate (FER) of a transmission scheme on an Additive White Gaussian Noise channel had been measured at equally spaced and ordered signal-to-noise ratio (SNR) values $\gamma_i$, with $i = 1, 2, \ldots, N$, the waterfall threshold $\gamma_w$ could have been obtained from

\[
\gamma_w = \left( \frac{1}{\gamma_k - \left( \frac{\gamma_k - \gamma_{k-1}}{2} \right)} - \sum_{i=k}^{N} P_e^G(\gamma_i) \right)^{-1} - \frac{N}{\sum_{i=k}^{N} P_e^G(\gamma_i)} \gamma_i^2 \left( \frac{1}{\gamma_k - \left( \frac{\gamma_k - \gamma_{k-1}}{2} \right)} - \sum_{i=k}^{N} P_e^G(\gamma_i) \right)^{-1},
\]

where the FER is $P_e^G(\gamma_i) = 1$ for $i < k$ and $P_e^G(\gamma_i) < 1$ otherwise. Unfortunately, a factor has been left out from the above equation, which is expression (23) in our original paper. Please note that the correct expression should have read

\[
\gamma_w = \left( \frac{1}{\gamma_k - \left( \frac{\gamma_k - \gamma_{k-1}}{2} \right)} - \sum_{i=k}^{N} P_e^G(\gamma_i) \right)^{-1} - \frac{N}{\sum_{i=k}^{N} P_e^G(\gamma_i)} \gamma_i^2 \left( \frac{1}{\gamma_k - \left( \frac{\gamma_k - \gamma_{k-1}}{2} \right)} - \sum_{i=k}^{N} P_e^G(\gamma_i) \right)^{-1},
\]

Thank you,

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