List of Errata to

Introduction to Multiple Antenna Communications and Reconfigurable Surfaces

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This document lists typos detected in the published manuscript of:

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This document will be updated if further typos are discovered.

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List of Errata

- In the first sentence on page 191, "(3.102)" in "The transmitted signal $\mathbf{x}$ in (3.102)" should be "(3.101)".
- In the third paragraph of Example 4.4, "$\log_2(81) = 6.34$" should be "$\log_2(81) \approx 6.34$".
- In Example 4.5, the sentence "The ML estimate of α is obtained by modifying (4.43) as" should be "The ML estimate of α is obtained by maximizing the the exponent in (4.39) in terms of α as". Moreover, the sentence "We notice that $\hat{\alpha}$ is the square root of the ML estimate of β in (4.43) (when $\hat{\varphi} = \varphi$)" in the next paragragh of the same example should be removed.
- In (4.130), $\mathbf{a}_3(\varphi, \theta)$ should be $\mathbf{a}_3(\theta, 0)$.
- On footnote 2 of page 610, "A capacitor adds a positive value to X_n and an inductor adds a negative value." should be "A capacitor adds a negative value to X_n and an inductor adds a positive value."
- In Eqn. (4.95), $\mathbf{a}_K(\varphi_\mathrm{t})$ should be replaced by $\mathbf{a}_K^*(\varphi_\mathrm{t})$.
- There should be an integral sign in the last expression of Eqn. (2.189) as

$$P_\mathrm{D} = \int_{\gamma'}^{\infty} f_{\mathrm{y}|\mathcal{H}_1}(y|\mathcal{H}_1)\, \partial y = \int_{\gamma'}^{\infty} \frac{1}{\sqrt{2\pi\sigma^2}} e^{-\frac{(y-1)^2}{2\sigma^2}} \partial y$$

  .
- On page (160), above Eqn. (3.23), in the sentence "...it can be either used to get a larger SNR, or we can reduce q by a factor $1/\|\mathbf{h}\|^2$ to get the same SNR as in the single-antenna case using less transmit power", $1/\|\mathbf{h}\|^2$ should be replaced by $1/M$. So the sentence becomes "...it can be either used to get a larger SNR, or we can reduce q by a factor $1/M$ to get the same SNR as in the single-antenna case using less transmit power."