List of Errata to Fundamentals of Massive MIMO

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This document lists misprints detected in the 2016 printing of of *Fundamentals of Massive MIMO* by T. Marzetta, E. G. Larsson, H. Yang and H. Q. Ngo.

The latest version of this document can be found at

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www.cambridge.org/Marzetta
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If you discover more errors, we highly appreciate it if you report them to us. Email: erik.g.larsson@liu.se

- 1. In Figure 2.2(a), there is a factor of two missing in the vertical axis label. It should read " $2|\cos(\cdots)|$ ".
- 2. In Section 2.3.4,

"The signal *x* and the noise *w* are uncorrelated, but not necessarily independent."

should read

"The signal x and the noise w are uncorrelated conditioned on g, $E\{x^*w|g\} = 0$, but not necessarily independent."

As an aside, note that the stated condition, $E\{x^*w|g\} = 0$, implies that $E\{g^*x^*w\} = 0$ and $E\{x^*w\} = 0$. These two, slightly weaker, conditions are together also sufficient for the bound in (2.44) to be valid. See also Problem 11.15 (in the document *Homework Problems to Go with Fundamentals of Massive MIMO*).

- 3. In the max-min SINR problems (5.10) and (5.24), SINR should be included on the lines "with respect to".
- 4. On page 118, line 5 from the bottom, "and 95% reliability" should read "and higher than 95% reliability"
- 5. In (C.14) and on the line before that equation, $Cov \{xx^H\}$ should be $Cov \{x\}$.
- 6. After (F.2), "receiver noise power" should be "thermal noise power". (The receiver noise power is the thermal noise power multiplied by the noise figure.)