

Erratum to “High-dimensional regression with unknown variance”

A σ^2 factor is missing in Proposition 5.1 of [1] (Page 511). In fact, one should read:

Proposition 5.1. *There exist positive numerical constants C , C_1 , C_2 , and C_3 such that the following holds. Assume that Λ contains $\bigcup_{\lambda \in \mathbb{R}_+} \{(\lambda, \dots, \lambda)\}$, that $T \leq (n - 2)/4$ and that*

$$1 \leq |\mathcal{K}_0| \leq C \frac{\kappa_G^2[3, |\mathcal{K}_0|]}{\phi_*} \times \frac{n - 2}{\log(M) \vee T}.$$

Then, with probability larger than $1 - C_1 M^{-C_2}$, we have

$$\|\mathbf{X}\widehat{\beta}_{\widehat{\lambda}} - \mathbf{X}\beta_0\|_2^2 \leq C_3 \frac{\phi_*}{\kappa_G^2[3, |\mathcal{K}_0|]} |\mathcal{K}_0| (T \vee \log(M)) \sigma^2.$$

References

- [1] GIRAUD, C., HUET, S., AND VERZELEN, N. (2012). High-dimensional regression with unknown variance. *Stat. Sci.* **27**, 4, 500–518.