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# Precise calibration of the dependence of surface brightness–colour relations on colour and class for late-type stars<sup>\*</sup> (Corrigendum)

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In the original paper, Salsi et al. (2020), there is a mistake in the calculation of the uncertainty on the angular diameter estimate. Equation (8) should be written as follows:

$$\sigma_{\theta_{LD,a,b,phot}} = 2 \ln(10) \theta_{LD} \sqrt{\sigma_{\theta_{LD,a,b}}^2 + \sigma_{\theta_{LD,phot}}^2}. \quad (1)$$

The photometric part of the uncertainty,  $\sigma_{\theta_{LD,phot}}$  (Eq. (10) in the paper), also contains an error. The correct formula is following:

$$\sigma_{\theta_{LD,phot}} = \sqrt{(0.1 + a)^2 \sigma_V^2 + a^2 \sigma_K^2 + (0.1 + 0.881a)^2 \sigma_{A_V}^2}. \quad (2)$$

Only considering arbitrary uncertainties of 0.022 mag on both  $V$  and  $K$  magnitudes leads to a precision of 1.30% on the angular diameter, and not 1.70% as indicated in the paper. The conclusions in the paper remain unchanged.

## References

Salsi, A., Nardetto, N., Mourard, D., et al. 2020, *A&A*, 640, A2

<sup>\*</sup> Based on CHARA/VEGA observations.