Highlights of Spanish Astrophysics XII, Proceedings of the XVI Scientific Meeting of the Spanish Astronomical Society held on July 15 - 19, 2024, in Granada, Spain. M. Manteiga, F. González Galindo, A. Labiano Ortega, M. Martínez González, N. Rea, M. Romero Gómez, A. Ulla Miguel, G. Yepes, C. Rodríguez López, A. Gómez García and C. Dafonte (eds.), 2025

Barbá 2: A new supergiant-rich Galactic stellar cluster

J. Maíz Apellániz¹ and I. Negueruela²

 $^{\rm 1}$ Centro de Astrobiología, CSIC-INTA, Spain

 2 Universidad de Alicante, Spain

Abstract

We present a new supergiant-rich stellar cluster hidden by extinction and christen it as Barbá 2, in honor of its discoverer Rodolfo Barbá. The cluster is at a distance of $7.39^{+0.65}_{-0.55}$ kpc and contains several supergiants, of which we provide spectral classifications for one blue, one yellow, and five red ones. The cluster extinction indicates an aboveaverage grain-size ($R_{5495} \sim 3.7$), its age has a minimum value of 10 Ma, and its core radius is 0.84 ± 0.19 pc.

Our contribution can be found at https://zenodo.org/records/ 13887178 in zenodo.org