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Carmencita: Know thy star, know thy planet

J. A. Caballero[1], C. Cifuentes[1], M. Cortés-Contreras[2], D. Montes[2], P. J. Amado[3], V. J. S. Béjar[4,5], E. Díez Alonso[6], J. C. Morales[7,8], S. V. Jeffers[9], V. Perdelwitz[10], A. Quirrenbach[11], A. Reiners[12] D. Revilla[3], I. Ribas[7,8], P. Schöfer[3], W. Seifert[11], Y. Shan[13], and L. Tal-Or[14]

[1]Centro de Astrobiología (CSIC-INTA), Spain; [2]Universidad Complutense de Madrid & IPARCOS, Spain; [3]Instituto de Astrofísica de Andalucía (CSIC), Spain; [4]Instituto de Astrofísica de Canarias, Spain; [5]Universidad de La Laguna, Spain; [6]Universidad de Oviedo, Spain; [7]Institut de Ciències de l'Espai (CSIC), Spain; [8]Institut d'Estudis Espacials de Catalunya, Spain; [9]Max-Planck-Institut für Sonnensystemforschung, Germany; [10]Weizmann Institute of Science, Israel; [11]Landessternwarte, Zentrum für Astronomie der Universtät Heidelberg, Germany; [12]Georg-August-Universität Göttingen, Germany; [13]Universitetet i Oslo, Norway; [14]Ariel University, Israel

Abstract

One saved observatory, more than 70 new exoplanets, 120 PhD/MSc/BSc theses, almost 140 refereed publications, and thousands of citations since the start of operations in January 2016 are a proof of the success of the CARMENES project at the 3.5 m Calar Alto telescope. There are multiple explanations for that success, from the hardworking dedication of many individuals in both Germany and Spain (engineers, students, postdocs, seniors), through a number of good technical decisions (optics, mechanics, electronics, software), to something more subjective such as the team spirit and friendliness. One of the key ingredients for this success is also the CARMENES input catalogue, dubbed Carmencita. Led from Spain, Carmencita is more than a simple catalogue, as it has included plenty of data taken from the literature and collected by ourselves on the brightest, closest M dwarfs observable from Almería. Many of the eventually targeted M dwarfs are now known to host planets with the greatest Earth Similiarity Indices or that are the most suitable ones for spectroscopic studies with the James Webb Space Telescope. I will summarise the effort by uncountable researchers and students that helped creating Carmencita: astrometry, photometry, spectroscopy, activity, kinematics, multiplicity, stellar parameters and everything relevant for characterising an exoplanet host star... Because one needs to know the star to know its planets!

Our poster in zenodo.org can be found here