

## CARMENES V. M dwarfs in multiple systems

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### Abstract

With the help of CARMENCITA, the CARMENES Cool dwarf Information and daTa Archive (see SEA poster by Caballero et al.), we investigate the membership in double, triple or higher-order multiplicity systems of more than 1300 of the brightest, latest M dwarfs in the solar neighbourhood observable from Calar Alto. We use data compiled from the literature and measured by us. Angular separations range from a few tenths of arcseconds to several arcminutes, which translate into a very wide interval of projected physical separations. Studying M dwarfs in multiple systems provides information on a wealth of topics, e.g. from dynamical masses, through distance and metallicity, to the formation and evolution of weakly bound systems.