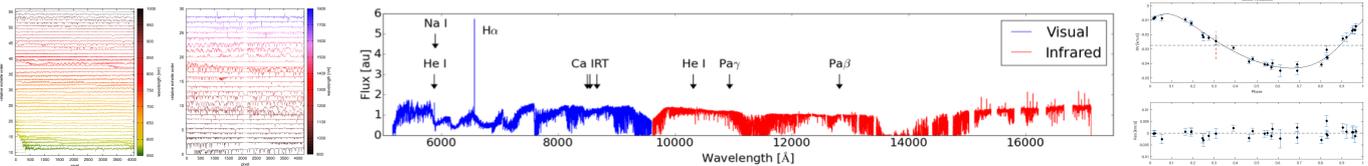


Carmencita, the CARMENES Cool dwarf Information and daTa Archive

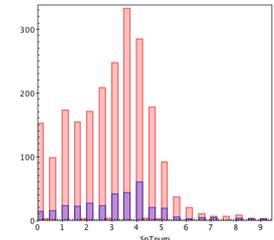
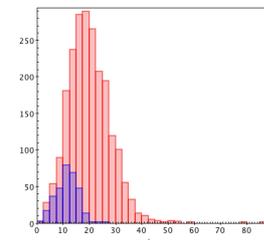
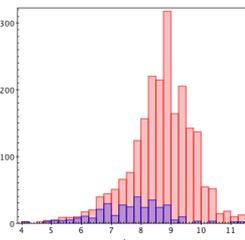


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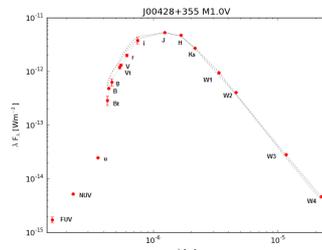
CARMENES, the new ultra-stable high-resolution spectrograph at the 3.5 m Calar Alto telescope and the only one in its category that covers from 0.52 to 1.71 μm in one shot, started its Guaranteed Time Observations (GTO) in January 2016 (see above real CARMENES spectra and *exoplanet*). Under GTO, CARMENES is monitoring approximately 300 selected M dwarfs for at least three years with the aim of finding rocky planets, perhaps habitable, orbiting around them. Those 300 GTO stars are the brightest and latest single M dwarfs observable from Calar Alto, which are carefully picked up from the CARMENES input catalogue, dubbed "Carmencita": CARMENES Cool star Information and daTa Archive. For each of the approximately 2200 M dwarfs in Carmencita, a team of German and Spanish astronomers involving PhD, MSc and BSc students has collected a large amount of information, compiled from the literature or measured by us with new data: accurate astrometry, spectral typing, photometry in 20 bands from the ultraviolet to the mid-infrared, rotational and radial velocities, X-ray count rates and hardness ratios, close and wide multiplicity data, kinematics, derived stellar parameters... The private on-line catalogue, including preparatory science observations (i.e., high-resolution imaging, low- and high-resolution spectroscopy), will be eventually public as a CARMENES legacy.



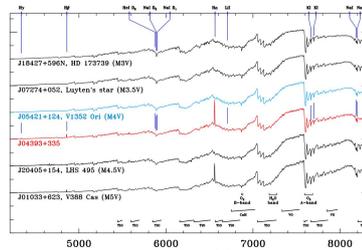
1. Our GTO programme: radial-velocity monitoring of about **300** M dwarfs during 600-750 useable nights in 2016-2018+.

2. The logo of **Carmencita**, the VO-compliant CARMENES input catalogue.

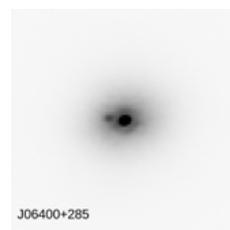
3. Carmencita contains ~ 2200 (red bars) **bright, nearby M dwarfs** carefully compiled from the literature. The ~ 300 brightest single M dwarfs with the latest spectral types and best observability from Calar Alto are our GTO targets (blue bars). Mean *J*-band magnitude, heliocentric distance and spectral types of the GTO sample are 7.7 mag, 11.6 pc and M3.0V, respectively.



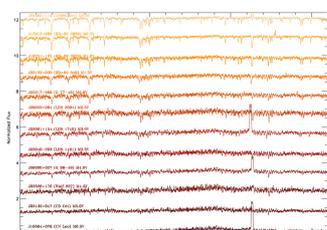
4. Multi-band photometry (FUV, NUV, *u*, BT, *B*, *g*, VT, *V*, *R*, *i*, *J*, *H*, *Ks*, W1, W2, W3, W4): for ETC, excesses, peculiarities. Also period finding (Diez-Alonso et al., [poster](#))



5. Low-resolution optical spectroscopy with CAFOS: for spectral types, selection criterion, activity (Ha), gravity, metallicity (Alonso-Floriano et al. 2015, A&A)



6. High-resolution lucky imaging with FastCam: for discarding M dwarfs with (new) companions at $\rho < 5$ arcsec (Cortés-Contreras et al., [poster](#))



7. High-resolution optical spectroscopy with FEROS, CAFÉ and HRS: for *vsini*, *V_r*, SBs, *T_{eff}*, logg. Also MERCATOR spectroscopy for metallicity (Alonso-Floriano et al., [poster](#))

