

Poster

Splinter Activity

CHROMOSPHERIC ACTIVITY INDICATORS IN VISIBLE LIGHT AND
NEAR INFRARED

P. Schöfer¹, A. Reiners¹ and the IAG CARMENES team¹

¹*Institut für Astrophysik, Georg-August-Universität Göttingen,
Friedrich-Hund-Platz 1, 37077 Göttingen, Germany*

Chromospheric activity imposes a challenge on high-precision radial velocity measurements and has therefore to be considered carefully by exoplanet hunters who are using the radial velocity method. CARMENES is searching for Earth-like planets around M dwarfs using two Échelle spectrographs which simultaneously cover wavelength ranges from 520 Å to 960 Å and 960 Å to 17100 Å. Using a spectral subtraction technique, we measure equivalent widths of several spectral lines that are sensitive to chromospheric activity in both the visible and the near infrared range.

The sample size of ~ 300 M dwarfs and more than 7000 observations in total enables us to study correlations between the strengths of the different spectral lines for individual stars and across the M dwarf range, which we present on this poster.