

Assessing the ages of young moving group binaries

Tuesday, 19 September 2017 19:15 (15 minutes)

Young moving groups (YMGs) are fundamentally important for constraining ages and evolutionary processes of young stars. As a consequence, constraining the ages of the groups themselves is of high priority. M-type stars offer an interesting path for this, since they remain in the pre-MS phase for ~ 100 Myr, comparable to the ages of YMGs, and thus are suitable for isochronal analysis. Dynamical mass in combination with bolometric luminosity offers particularly good isochronal prospects. Close binaries provide the possibility to constrain both of these properties, and are thus the most valuable targets available. Here I report on a campaign to monitor binaries in YMGs that have been spatially resolved in the AstraLux M-dwarf multiplicity campaign. The binaries are followed up both with AstraLux imaging for additional astrometry, and with a radial velocity campaign. I will present results on the most promising, most peculiar, and most devious cases in the sample.

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Session Classification: Pre-main sequence stars and the connection to the formation and early evolution of stars and planetary systems