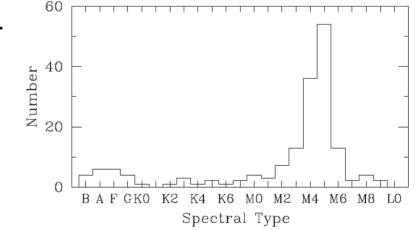


Census of Nearby Association 32 Ori

A census of the stellar population in a nearby (~100 pc) young (<100 Myr) stellar group is performed, using IRTF/SpeX and iSHELL spectroscopy. This informs studies of stellar evolution, protoplanetary disks and planet formation, with, e.g., ALMA.

- F_λ∕F_{1.68}+constant ∞ M5.5 M6.5 2 MMN 1.5 2 $\lambda(\mu m)$
- GAIA distances used for the group surrounding 32 Ori (and 118 Tau)
 - 169 members studied
 - SpeX spectroscopy for spectral classification (left Figure)
 - iSHELL spectroscopy for radial velocity determination. Uses atmospheric modes and Xtellcor_model software for telluric correction, greatly enhancing observing efficiency.



 $_{2.5}^{-1} \bullet$ Typical spectral type M5 (~0.15 M_{sun}; Figure above)

Luhman, Astronomical Journal 164, 151, 2022; https://arxiv.org/abs/2208.06715

Association is expanding