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.

- 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.
- Association is expanding
- Typical spectral type M5 (~0.15 M_{sun}; Figure above)