

## Kinematics of T Tauri stars in and around nearby associations

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The ROSAT All Sky Survey (RASS), in combination with optical follow up observations, has revealed a large number of new T Tauri stars located not only near to molecular clouds, but also up to some  $10^\circ$  away from the centres of some nearby T associations like Chamaeleon (Alcalá et al. 1995), Taurus-Auriga (Neuhäuser et al. 1997) and Lupus (Wichmann et al. 1997).

We could identify a large fraction of these stars in STARNET, a proper motion catalogue down to about  $V=12$  mag (Röser 1996), and compare the proper motions of the wide spread population of new, mostly weak-line T Tauri stars (WTTS) to those of the classical T Tauri stars (CTTS) in the centres of the clouds.

Whereas in Taurus-Auriga the newly discovered WTTS south of the association move in direction of the centre of the star forming region (Frink et al. 1997), the WTTS discovered outside Lupus show only slightly different motions from the cluster mean, consistent with the scenario that these stars are slowly dispersing away from the centre.

In Chamaeleon, the youngest pre-main sequence stars show similar proper motions with a much smaller dispersion than other RASS selected stars with smaller lithium abundances.

Finally, we compare the kinematics of well-known early type members of the Upper Scorpius association with some newly discovered late type members (Kunkel 1997, Preibisch et al. 1997).

### References

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