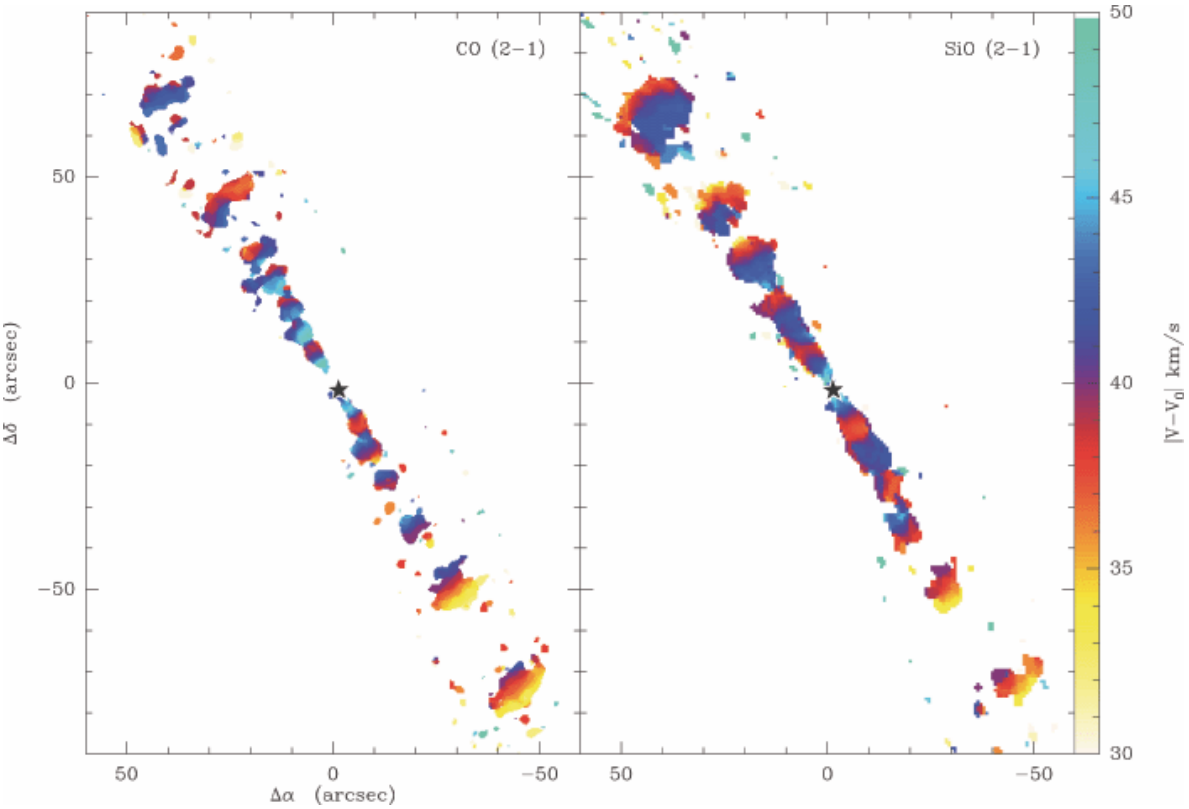
Astronomy & Astrophysics

HIGHLIGHTS: this week in A&A

Volume 495-1 (February III 2009)



In section 6. Interstellar and circumstellar matter

"Shells, jets, and internal working surfaces in the molecular outflow from IRAS 04166+2706", by J. Santiago-Garcia, M. Tafalla, D. Johnstone, and R. Bachiller, A&A 495, p. 169

Santiago-Garcia et al. present high-angular PdB interferometer and the IRAM 30 m single-dish observations of a remarkable bipolar outflow emerging from IRAS 04166+2706, one of the youngest protostars in the Taurus molecular cloud. Their observations favor outflow wind models that have both wide- and narrow-angle components, and suggest that the extremely high-velocity peaks observed in a number of outflows consist of internally-shocked wind material.

In section 7. Stellar structure and evolution

"Properties of WNh stars in the Small Magellanic Cloud: evidence for homogeneous evolution", by F. Martins, D.J. Hillier, J.C. Bouret, E. Depagne, C. Foellmi, S. Marchenko, A.F. Moffat, A&A 495, p. 257

This paper provides the first strong observational evidence for a quasi-chemically homogeneous evolution of rapidly rotating low-metallicity massive stars - a scenario proposed to lead to long gamma-ray bursts, which has strong implications for the ionizing photon output of massive stars in the early universe.