

While we cannot disentangle the full three-dimensional magnetic field structure of the cloud, we can account for these features and several others with a simple model of field geometry which arises not from these data but from the supernova-induced star formation proposal made by Herbst and Assousa (1977). The observed general alignment of vectors with the arced dust cloud in CMa R1 supports a model of this nature as opposed to one in which the cloud formed by gravitational collapse of material along the field lines. The latter would result in a cloud whose long axis is perpendicular to the field lines, not parallel to them. Our results provide significant new evidence that star formation in CMa R1 was triggered by cloud collapse due to an external source of compression (most likely a nearby supernova) rather than quiescent collapse along magnetic field lines. Whether the subgroup structure among the newly formed stars, as discussed by Baierlein *et al.* (1981), really arose as a result of the instability suggested by them cannot be answered by our data, although that scenario certainly remains plausible.

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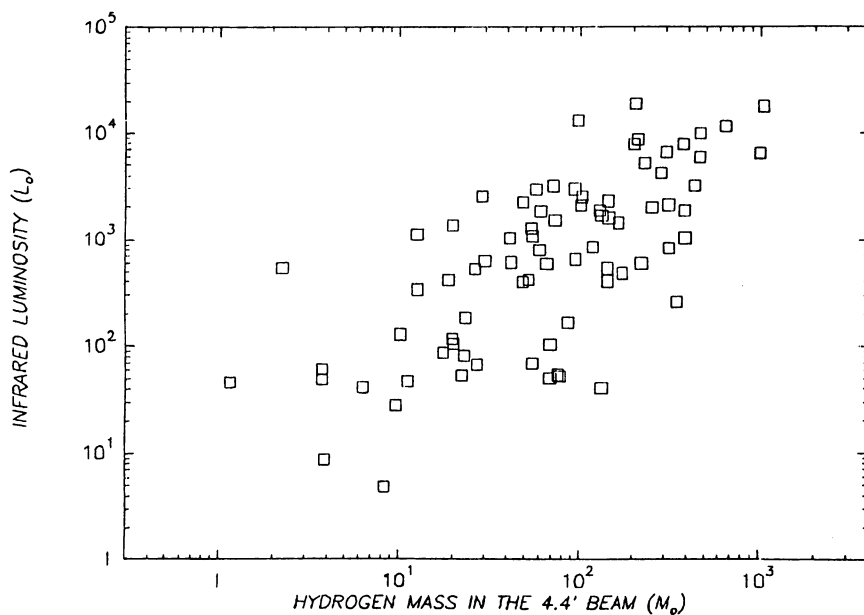
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COMPARISON OF CO AND IR EMISSION OF IRAS UNIDENTIFIED SOURCES

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IR observations with the IRAS satellite have revealed in the galaxy a lot of point-like unidentified sources: they have no optical or radiocontinuum counterpart, and cannot be known stars, nor H II regions. We have undertaken mm-wave observations of a sample of ~ 100 of these sources with the Bordeaux telescope (beamsize = $4.4' \sim$ IRAS resolution). These sources seem to be associated with protostars or young stars still embedded in molecular clouds. Some of the sources present high-velocity wings, suggesting a bipolar gaseous ejection from the protostar.

There is a rather good correlation between the ^{13}CO luminosity in the central beam and the total infrared luminosity. Distance of sources is determined from the CO velocity, and our sample spans a range between 0.3 and 3 kpc. The results suggest that the luminosity of the central object in each source is related to the mass of the parent molecular cloud.



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