Magnetic fields in the Jellyfish (G0.55-0.85) Complex

- Harriet Parsons

The recently commissioned POL-2 instrument on the JCMT is providing insights into the role of magnetic fields across a range of star-forming regions. I present new submillimeter observations of G0.55-0.85, the Jellyfish complex, located 2 kpc away. This region is a site of massive star formation with many of the classic signposts. I present CO isotopologue data, dusty SCUBA-2 data at both 450 and 850 microns, and linear dust polarization measurements taken with the JCMT. The morphology of the magnetic field in the Jellyfish appears to be influenced by the outflows present. This is mostly likely an effect of mechanical grain alignment from the newly forming stars. I discuss the physical conditions of the molecular cloud, its morphology and the roles of outflows and magnetic fields in shaping this stellar nursery.

Molecular Clouds