

Dust and Gas Temperatures in Orion B

N.F.H. Tothill, G.F. Mitchell

Department of Astronomy and Physics, St Mary's University, Halifax, NS. B3H 3C3. Canada.

nfht@ap.stmarys.ca

The temperature of the Interstellar Medium is one of the fundamental physical parameters needed to understand its evolution, and especially star formation. It is also very difficult to constrain, requiring time-consuming observations that are often model-dependent.

We present millimetre-wave formaldehyde line data that allow us to derive the temperatures of gas cores in the high-mass star forming region Orion B. We compare this data with our submillimetre continuum maps of the region, and discuss the potential of FIRST for measuring dust and gas temperatures in regions such as this.