

Plenary Talk

THE COLD INTERSTELLAR MEDIUM AND STAR FORMATION

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Stars like our Sun form within molecular clouds in the interstellar medium of our Milky Way and other galaxies. In this review talk, I shall describe physical and chemical processes in the cold interstellar medium, which allow the formation of molecules and the fragmentation into filaments, dense cores and ultimately into protostars and stellar systems. Observational and theoretical effort on the problem of protoplanetary disk formation and the production of pre-biotic molecules will also be discussed.