SEMINARIO DEL DEPARTAMENTO DE FÍSICA TEÓRICA

28 de Abril de 2010, 15 h., Módulo 15 (C-XI) aula 201

Protostellar Discs: What You Always Wanted to Know but Were Afraid to Ask

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Abstract: A circumstellar disc is a natural by-product of the star formation process, in which gas giant planets are expected to form within the first 10 Myr. These discs are initially gas-rich and optically thick, and will gradually evolve towards gas-poor, optically thin discs in which planets no longer can form. The first step into planet formation is grain growth, which will occur more rapidly in denser regions in the disc. In this talk I will address how different observations are used as a diagnostic of the disc structure or of the gas/dust properties. The dust characteristics such as grain size and crystalline fraction are mainly derived from mid-infrared Spitzer observations, while the first far-infrared observations with the Herschel Space Observatory allow us to derive the gas temperature and gas mass still present in the disc. Finally, I will correlate the disc and dust/gas properties with the stellar properties, when possible.

Más información: http://www.ft.uam.es/seminarios.html