

Laboratory astrophysics in Europe and the ties to various missions

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Abstract

The forthcoming NASA missions are expected to provide spectral energy distributions and a multitude of molecular line data in a variety of astrophysical environments. Identification, analysis and interpretation of these data in terms of the physical and chemical characteristics of the astronomical sources require a concerted effort by physicists, chemists and astronomers.

Related projects are presently in progress and supported by the European community within the frame of a FP6 network labelled "The Molecular Universe". I will report on such recent achievements and tasks undertaken in different european groups. The areas of molecular spectroscopy, collisional excitation processes and chemical reactions will be addressed specifically.