

## **In preparation to Gaia: compilation of late-type stars possible members of stellar kinematic groups (stellar streams, moving groups, and associations)**

**D. Montes**<sup>1</sup>

<sup>1</sup> Departamento de Astrofísica, Facultad de Física, Universidad Complutense de Madrid, E-28040 Madrid, Spain

### **Abstract**

In this contribution we present a compilation of late-type stars (F, G, K and M) possible members of the different stellar kinematic groups analysed in the literature. We include the young and old classical moving groups and superclusters, the recently identified young nearby loose associations as well as other stellar streams identified in recent surveys that contains large number of dwarf and giant stars. These stars was selected by using kinematics (with the precision currently available), by using an age-oriented method using relative age indicators (Li abundances, chromospheric and coronal emission and the kinematics) as well as color-magnitude diagrams and pre-main sequence isochrones or by chemical tagging. However, to add constraints to the membership and be able to discern between different groups of similar age a much better kinematic is needed and this will be only possible with the forthcoming precise data that Gaia will provide. The compilation provide here will be ready to use the data of Gaia as soon as will available in order to be able to better understand the stellar kinematic groups and discern between real physical structures of coeval stars with a common origin (debris of star-forming aggregates in the disk) and field-like stars (structures formed by resonance interactions, associated with dynamical resonances (bar) or spiral structure).

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