

## STELLAR POPULATIONS OF A LOCAL SAMPLE FROM ITS VELOCITY DISTRIBUTION

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In the solar neighbourhood, we can assume that a stellar sample is composed of two stellar populations: thin disk and thick disk stars. If we assume as the only hypothesis that each stellar component is associated with a Schwarzschild velocity distribution function (e.g., Sanz, J., Juan, J.M., this symposium), then it is possible to determine the velocity distribution of both components (Cubarsí, R.: 1990, AJ 99, 1558). Thus, starting from the central velocity moments up to fourth order of the overall stellar sample we obtain the partial moments, the difference between centroid velocities and the percentage of mixture. Moreover, a set of 25 constraint equations between the total moments is determined. This method has been applied to some local stellar samples under the hypothesis of a two-component mixture (Hernandez-Pajares, M.: 1991, this symposium) and the obtained kinematical features of the stellar components are in agreement with kinematical properties of thin disk and thick disk stars described from other physical viewpoints (e.g., Sandage, A.: 1987, in *The Galaxy*, eds. G. Gilmore, R.F. Carswell (Reidel), p. 321).

## THE GROUP OF Be/X-RAY SOURCES IN THE GALAXY

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The group of known X-ray sources associated with a Be star in a binary system consists of about 40 objects. They are the most abundant type of massive X-ray binary in the Galaxy. In this contribution we present an up-to-date picture of the main physical characteristics of these objects, including their evolutionary history, mass transfer mechanism, an interpretation of their behaviour in the orbital versus spin period diagram and the use of Be/X-ray sources as galactic tracers.