The Pleiades as seen by TGAS and the Virtual Observatory.

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Abstract

Using the Tycho-Gaia Astrometric Solution (TGAS), we revisited the very well known Pleiades open cluster. With Clusterix, a Virtual Observatory (VO) tool developed by the Spanish Virtual Observatory (SVO) which is presented in this meeting, we were able to provide membership probabilities to the TGAS sources in the Pleiades region, separating cluster member candidates from field stars. In a second step, we refined the membership assignation fitting Gaussians to the astrometric solution. We identified 156 Pleiades members, and ruled out 173 sources which are classified as Pleiades members in SIMBAD. Finally, we used VOSA, VO SED Analyser, another VO tool also developed by the SVO, to derive the physical parameter of the Pleiades members with the goal of study the IMF of the open cluster. (See poster).

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