

## Clustering properties of Herbig Ae/Be stars.

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### Abstract

We study Herbig Ae/Be (HAeBe) stars which are optically visible pre-main sequence stars of intermediate-mass. They represent the most massive objects to experience an optically visible pre-main sequence phase, bridging the gap between low- and high-mass stars. Building on the ideas from Testi et al. (1997, 1998, 1999), we are investigating the presence of clusters around previously known and newly discovered intermediate-mass pre-main sequence HAeBe stars with the detailed astrometric data offered by Gaia. This will enable us to determine the position of the HAeBe stars in the HR diagram and allow us to detect and confirm the presence of the clusters around them. In the poster, we outline the preliminary results obtained with Gaia DR2 through the algorithm we developed for the detection and analysis of the clusters and clustering properties of the HAeBe stars. (See poster).