

Propuesta de tesis de Magister/Doctorado. VVV search for the new open clusters in our Galaxy.

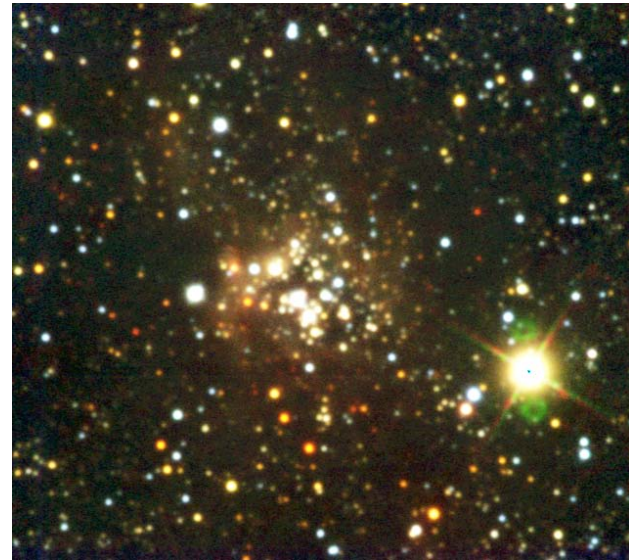
en colaboración con Prof. J. Borissova, Univ. Valparaíso

It is a well established fact that the majority, if not all, of stars form in star clusters. Therefore it is vital for the understanding of the formation, evolution and dynamics of galaxies to understand the formation, evolution, dynamics and destruction of star clusters, which can be thought of as the basic building blocks of star formation in a galaxy.

VISTA Variables in the Vía Láctea (VVV) is one of the six ESO Public Surveys selected to operate with the new 4-meter Visible and Infrared Survey Telescope for Astronomy (VISTA). One of the main goals of the VVV Survey is to search for new star clusters of different ages using automatic and semi-automatic methods.

The proposed thesis will include improvement of the existing search algorithm and code and its implementation on the VVV images.

The project is supported by Fondecyt 1080086 and Milky Way Millennium Project P07-021-F.



Propuesta de tesis de Magister/Doctorado

Tracing the Galactic structure by open clusters.

en colaboración con Prof. J. Borissova, Univ. Valparaíso

VISTA Variables in the Vía Láctea (VVV) is one of the six ESO Public Surveys selected to operate with the new 4-meter Visible and Infrared Survey Telescope for Astronomy (VISTA). VVV is scanning the Milky Way (MW) bulge and an adjacent section of the mid-plane, where star formation activity is high. The VVV survey area contain about 300 know open clusters of different age. These clusters will be used to build a homogeneous, statistically significant sample to investigate the structure of the Galactic disk in the directions intercepting the bulge.

- The proposed thesis will include construction of color- magnitude diagrams of the clusters and determination of their fundamental parameters – age, distance, mass, etc.
- The project is supported by Fondecyt 1080086 and Milky Way Millennium Project P07-021-F.

