

Hierarchical clustering in the Local Group dwarf galaxy NGC 6822

S. Schmeja,¹ D. A. Gouliermis,² R. S. Klessen,¹ W. J. G. de Blok³
and F. Walter²

¹Zentrum für Astronomie der Universität Heidelberg, Heidelberg, Germany

²Max-Planck-Institut für Astronomie, Heidelberg, Heidelberg, Germany

³Department of Astronomy, University of Cape Town, Cape Town, South Africa

Abstract. Star formation appears to be clumped into a hierarchy of structures, from giant molecular clouds down to individual cores and clusters, which are often hierarchical themselves, showing significant substructure. This has been demonstrated for our Galaxy through the application of sophisticated statistical methods, in particular the nearest-neighbour density and the minimum spanning tree (MST), to different star-forming regions. Here we present our analysis of clustered star formation as demonstrated through the detection of structures of young stellar populations in the dwarf star-forming galaxy NGC 6822.

Keywords. galaxies: Local Group, galaxies: star clusters, galaxies: stellar content, galaxies: structure

The full poster (in pdf format) is available at
<http://www.astro.iag.usp.br/~iaus266/Posters/pSchmeja.pdf>.