

Título/Title:

The feedback effect of massive stars on galactic bubbles

Orientador/Supervisor:

Pedro Palmeirim (pedro.palmeirim@astro.up.pt)

Local do Estágio/Host Place:

IA-Porto

Descrição/Description:

Star formation is a fundamental process for the enrichment of the InterStellar Medium (ISM), having driven the evolution of matter from the primordial conditions to the complex and chemically diverse conditions essential for life. This ongoing recycling process that continuously enriches the ISM is mainly regulated by the feedback from massive stars and clusters that enable star formation in a self-consistent manner.

Thousands of HII bubble structures are catalogued throughout the Galactic Plane and it's estimated that they are responsible for 25% of the active star-formation of the Milky Way.

This project aims to analyse a large sample of galactic bubbles in order to classify their morphology and to measure the level of emitted radio continuum flux to derive the age of their expansion.

Requisitos/Requirements:

Some experience with programming language (C++/Fortran/Phyton/IDL/TopCat...) to manage large sets of data. Some level of experience with astronomy photometry tools is preferred but not compulsory.