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Cygnus-X as never seen before: a WEAVE high-resolution survey

Berlanas, S. R.[1,2], **Herrero, A.**[1,2] **and the WEAVE-SCIP team**

[1] Instituto de Astrofísica de Canarias, E-38 200 La Laguna, Tenerife, Spain
[2] Departamento de Astrofísica, Universidad de La Laguna, E-38 205 La Laguna, Tenerife, Spain

Abstract

The Cygnus-X complex is the most powerful massive star-forming region at less than 2 kpc from us. The region has been largely studied along the last decades, but there has been no extensive and homogeneous spectroscopic survey on its stellar population despite its importance to our limited knowledge of star formation and evolution of star-forming regions and stellar clusters.

In this contribution I present one of the three sub-surveys of the Stellar, Circumstellar and Interstellar Physics survey (SCIP): the WEAVE high-resolution survey in the Cygnus-X complex, which will provide high-quality spectra over the coming years for thousands of massive stars in several rich Cygnus OB associations. I will introduce main objectives of this project, target selection and observing strategies, as well as the science verification project associated to this survey. Combining WEAVE data and the expected accuracy that *Gaia* will reach in the Cygnus-X area (DR4 and forthcoming releases) we will be able to perform the deepest multi-dimensional study ever done before in a massive star-forming complex.

My poster in zenodo.org can be found here