# Getting ready for Gaia: 3D structure of the ISM

Special Session 20 at the EWASS 2015

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## Scientific Organizing Committee

# FOREWORD

Thanks to multi-object spectrographs and robotic telescopes, we live in an epoch where large spectroscopic and photometric surveys offer the possibility to infer the 3D structure of the ISM at Galactic scales. Results on this have recently appeared using data from numerous on-going surveys, including SDSS, RAVE, IPHAS, Pan-Starrs, and Gaia-ESO in the optical, as well as 2MASS and APOGEE in the infrared. The use of absorption/extinction data as a tool to gain insight into the Galactic ISM structure has become more prominent following the launch of Gaia in December 2013. This mission will provide the astronomical community with accurate positions of about one billion stars, allowing us to build three-dimensional maps of the Galaxy. At the time of the EWASS 2015 meeting, Gaia had been operating for more than one year. A new and promising tool has also started to be used in recent years: Diffuse Interstellar Bands (DIBs). Even if the nature of their carrier(s) (i.e. the agent that produces these features) remains a mystery, they nonetheless appear to be good tracers of the ISM. The aim of the meeting held in Tenerife was to bring together researchers taking part in the main optical and infra-red surveys to discuss how to exploit absorption data as a tool to learn about the 3D structure of the ISM in our Galaxy.

We would like to thanks all the colleagues that attended this special session. Their enthusiastic participation gave us all the opportunity to enjoy many interesting oral contributions and posters as well as lively discussions. This workshop could not have taken place without the support of the organizers of the EWASS (European Week of Astronomy and Space Science) 2015. We are very grateful to the SOC of the EWASS 2015 and in particular to the co-chairs, Cathie Clarke, Johan Knapen and Jose Miguel Rodríguez Espinosa. Likewise, we would like to thank the EWASS LOC for taking care of all the logistic related issues. Special thanks to Sergio Simón Díaz who was permanently with us making sure that the sessions were passing softly.

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