



Jaume Orell Miquel

Exoplanets and the Solar System

PhD Student

1/10/2020 - 30/09/2024

I graduated in Physics from the Universitat de les Illes Balears (UIB) and I continued my studies by taking a Master's degree in Astrophysics at the Universidad de La Laguna (ULL). It was during the Master's Final Project when I was introduced to the world of exoplanets and I decided to do my PhD in this booming field.

My thesis project, directed by Dr. Felipe Murgas and Prof. Enric Pallé, aims to study and characterise planetary atmospheres at high resolution. Combining data from the most accurate spectrographs such as ESPRESSO, HARPS-N or CARMENES and using different analysis techniques such as transmission spectra and cross-correlation, the presence of atoms, ions and molecules can be detected. This analysis is mainly focused on the infrared light range, for the detection of helium, water and other molecules in the atmospheres of distant planets.