

## SUBJECT: ERC-funded PhD position(s) in Star and Planet formation at ESO

Up to two PhD positions on observational studies of protoplanetary disk evolution and planet formation are offered. The PhD student(s) will join the research group funded by the European Research Council (ERC) Project WANDA (<a href="www.eso.org/~cmanara/wanda\_erc.html">www.eso.org/~cmanara/wanda\_erc.html</a>), led by Carlo F. Manara, at the ESO Headquarters in Garching, Germany.

The WANDA project aims at tackling the question on when and how exo-planets formed by investigating the origin of the ring-like and asymmetric structures observed in protoplanetary disks, the cradle of planets, and pushing such studies to the distant and massive star-forming regions, the locations that best represent the natal environments of the known exo-planets. The WANDA team will employ a novel multi-wavelength and multi-technique observational approach, based on a combination of high-resolution spectroscopy, spatially resolved integral field spectroscopy, and high spatial resolution imaging at near-infrared and millimeter wavelengths.

The PhD student(s) will develop an original research program based on optical high-resolution spectroscopy and integral field spectroscopy of pre-main sequence stars. The aim is to determine wind properties for these targets, to be compared with disk morphologies, as well as their stellar and accretion properties. The PhD student(s) will collaborate with the WANDA team and other collaborators at ESO, and interact with collaborators from the international ULLYSES and PENELLOPE projects (see here https://sites.bu.edu/odysseus/ for details) and many other colleagues, while being fully inserted in the ESO science environment.

The position(s) will be funded for a duration of 3 years (36 months), with possible extensions of up to 6 additional months. Salary will be in line with typical ESO Student salaries. The position includes the benefits as outlined under <a href="https://www.eso.org/public/jobs/conditions/paidassoc/">https://www.eso.org/public/jobs/conditions/paidassoc/</a> and a generous travel budget. The applicant must have a MSc or equivalent degree in physics or astrophysics, completed before the start of the position. Expertise with optical spectroscopy and programming (e.g. Python) is desirable. We regard diversity as an asset within a team, and welcome applicants with diverse backgrounds and experiences.

The application form is available at <a href="this-link">this link</a>. This form includes a summary of education, previous research experience(s), skills, and motivation. The candidate should arrange for two letters of recommendation to be sent directly to Carlo F. Manara. **The deadline for applications is April**, **13th 2022**, and the selection process will start shortly after. The starting date is negotiable, but it must be between May and December 2022.

Contact for application and further information: Carlo F. Manara (cmanara@eso.org)

