

The Observational Cosmology and Extragalactic Astrophysics group at the Institute of Space Sciences (ICE, CSIC ; www.ice.csic.es/en/home) invites applications for one PhD position to start on or around September, 2022.

We are looking for motivated and talented students, interested in studying the evolution of the Universe and the underlying cosmological model using large galaxy surveys. The group has broad expertise in several different aspects of observational cosmology, including galaxy clustering, galaxy formation, weak gravitational lensing, type Ia supernovae, baryonic acoustic oscillations, large cosmological simulations and the cosmic microwave background, and is actively involved in a wide range of international collaborations, namely the Dark Energy Survey (DES, www.darkenergysurvey.org), the Rubin Observatory LSST (www.lsst.org), the ESA Euclid mission (www.euclid-ec.org), the Physics of the Accelerated Universe (PAU, www.pausurvey.org) and The Dark Energy Spectroscopic Instrument (DESI, www.desi.lbl.gov). The successful candidate is expected to work primarily on the analysis of DES, LSST and/or Euclid data, although involvement in other projects will be possible.

The Institute of Space Sciences has been recently distinguished as one of the Maria de Maeztu institutions in Spain, a highly distinguished excellence-in-research recognition. The group has wide access to local supercomputing facilities: the Marenostrum supercomputer (www.bsc.es/marenostrum/marenostrum, a Tier-0 system of the european PRACE network), the ICE computing cluster (with about 400 hyperthread cores and 5TB RAM), the Port d'Informacio Cientifica (www.pic.es), and its HPC facility for big data sharing/distribution CosmoHUB (www.cosmohub.pic.es), in addition to the computing resources available to the international collaborations mentioned above.

The successful candidate will work under the supervision of Carles Sánchez and potentially one other member of the group, which includes senior researchers F. Castander, M. Crocce, P. Fosalba, L. Galbany and E. Gaztanaga.

Applicants are expected to have the academic credentials to enroll in the PhD program at the Autonomous University of Barcelona (UAB, www.uab.cat) during the 2022/2023 academic year. In most cases, this translates into the need to have completed, or be close to complete, an MSc (Master) degree or equivalent. The position is for three years in the first instance, with the possibility of a one additional year extension, with salary and benefits in line with other PhD positions in Spanish institutions.

Interested candidates should submit a short CV and a copy of the relevant academic transcripts to info@ice.csic.es and carles.sanchez.alonso@gmail.com, with the email subject 'COSMOPHD' plus the surname(s) of the applicant. We encourage candidates to contact us and submit their materials before May 15, 2022, but the position will remain open until filled. Questions regarding the position can be addressed to carles.sanchez.alonso@gmail.com and lgalbany@ice.csic.es. We welcome applications from all qualified candidates, but applications are particularly encouraged from traditionally under-represented groups in science.