

# Post-doctoral Researcher in Observational Cosmology and Galaxy Evolution

The Centro de Estudios de Física del Cosmos de Aragón (CEFCA) is seeking a post-doctoral researcher in observational Cosmology and Galaxy Evolution, with preference given to candidates with experience in photometric redshift estimation. During a 1+1 year post-doctoral contract, the candidate will conduct preparatory Science for the Javalambre-PAU Astrophysical Survey (J-PAS).

CEFCA (<http://www.cefca.es>) is a new research institution located at the city of Teruel (Aragón, Spain) which is in charge of the construction and operation of the Javalambre Astrophysical Observatory (OAJ). In this observatory two different sky surveys will commence in the following years: the J-PLUS survey, starting in 2014, to be conducted by the 80 cm-diameter Javalambre Auxiliary Survey Telescope (JAST), and the J-PAS survey (<http://j-pas.org>), starting in 2015, to be conducted by the 250 cm-diameter Javalambre Survey Telescope (JST). The Javalambre-Photometric Local Universe Survey (J-PLUS) will serve as a photometric calibrator for J-PAS, the latter scanning 8,500 square degrees with the wide field camera JPCam (with a FoV of 3 degrees of diameter) and 54 narrow band filters (of width  $\sim 14$  nm) plus five other broad band filters. While the main scientific driver of J-PAS is the study of Dark Energy by measuring Baryonic Acoustic Oscillations (BAOs), there is a wealth of scientific areas and problems that will significantly benefit from this survey.

CEFCA will play a leading role in the analysis and scientific exploitation of the data produced at the OAJ. As part of this involvement, CEFCA is hiring a young postdoc in the field of Cosmology, preferentially with experience in photometric redshift estimation (although candidates with experience in other cosmological topics such as gravitational lensing or 2-point and 3-point statistic estimation in galaxy surveys are also very welcome to apply).

The candidate will immediately become full member of the J-PAS collaboration, a status exclusively linked to the commitment to the collaboration (and not to the duration of the contract). The expertise of the Cosmology Group at CEFCA includes Computational Cosmology, the study of the Large Scale Structure at low and high redshifts and its interplay with the Cosmic Microwave Background radiation, (CMB). The Cosmology Group at CEFCA interacts closely with the Galaxy Evolution Group, with expertise in Stellar Populations, mergers, quasars and Emission Line Galaxies.

While being relatively modest in size (pop. 35,000 inhab.), the city of Teruel combines the services of a province capital with a rich historical and cultural heritage, and this directly benefits its quality of life. Teruel is situated at about 90 mins away from two major Spanish capitals like Zaragoza and Valencia, and about 60 mins from the Mediterranean coast, (see, for further details, [http://www.turismo.teruel.es/?lang=en\\_US](http://www.turismo.teruel.es/?lang=en_US)).

## Terms and Conditions

Previous Experience:

**Applicants should preferably have passed the PhD exam not earlier than 2011 in the field of Cosmology and Galaxy Evolution.**

Work Place:

**CEFCA Headquarters, Teruel**

Contract

Duration:

**The appointment will be made for a period of 1+1 years on a salary ranging from 28,000€ to 32,000€ per year (before taxes).**

Deadline:

**February 28th, 2014**

Applications:

**Applications consisting of 1) a full CV, 2) a statement of research interests, and 3) a minimum of two reference letters, should be submitted via email (Subject: "Ref.0036. Postdoc Photo-z's") to [jobs@cefca.es](mailto:jobs@cefca.es), by the above closing date.**

For further information, please contact

Raúl	E.	Angulo,	rangulo	AT	cefca.es
Silvia	Bonoli,	sbonoli	AT		cefca.es
Carlos Hernandez-Monteagudo,	chm	AT	cefca.es		