



CONTRACT ANNOUNCEMENT

Experimental Physics Division

Deadline: February 15th 2011

Ref.: LST-SYS

Position:

System Engineer for the Large Size Telescope of CTA

Profile:

Engineer or physicist with engineering background in electronics, mechanics or optics.

Introduction

The Cherenkov Telescope Array CTA will be the next-generation facility for high-energy gamma-ray astronomy, consisting of 50-100 telescopes of the 6, 12 and 24 m class. After a three years period of Design Study, the CTA project has entered its EC funded Preparatory Phase, with the goal to develop implementation plans for the observatory. This includes the construction of prototypes of telescope sub-systems and of their components and assemblies. As part of the Preparatory phase, a team of engineers and technical physicists will be setup, to support prototyping projects at different laboratories, and to integrate them into the system development process.

Detailed information on the design of the CTA is available at:

<http://xxx.lanl.gov/pdf/1008.3703>.

More information on the CTA project can be found at:

<http://www.cta-observatory.org/>

The present position should cover the system engineering of the 24m-class Large Size Telescopes (LST) of CTA during its preparatory phase, and it is assigned to the CTA-Spain Consortium, constituted by research groups at CIEMAT and UCM (Madrid), UAB, ICC-UB, ICE-CSIC and IFAE (Barcelona) and IAC (Tenerife). More information (in spanish) at:

<http://www.observatorio-cta.es/>

Work environment:

The appointed engineers/physicists will form a project coordination and system integration team within the CTA Project Office, which will be complemented by local personnel from the laboratories and institutes at which prototyping work for the telescopes and other sub-systems is being performed. The team will be responsible for the integration of those telescopes and sub-systems to form the CTA, and for the development and documentation of the technical implementation plans for the future telescope array.

Tasks:

Support and oversight of the telescope prototyping projects in the following areas:

- System design and integration
- Configuration management
- Verification and validation of sub-system specifications and components
- Change management
- Risk- and cost-analysis
- Documentation
- Support of quality control and quality assurance within the technical

Specifically, the above will entail:

- Maintenance of a project database for the prototyping projects
- Maintenance of WBS (work breakdown structure) and PBS (product BS)
- Collection and documentation of technical requirements and specifications
- Definition and documentation of system and sub-system interfaces
- Documentation of progress of project
- Support of the CTA technical coordinator and project manager

Position:

- Full-time, up to 3 years, based at IFAE Barcelona, Spain.
- Start date not later than April 1st 2011
- The position requires a significant fraction of the time travelling, to work with the prototyping projects; ~ 50 % of the work time will be at the CTA Project Office in Heidelberg, Germany.

Skills and knowledge

Essential skills:

- Ability to understand technical requirements resulting from physics specifications in the fields of electronics, mechanics or optics.
- Experience in technical development projects in one of these fields.
- Experience in the preparation of technical documentation
- Experience in the preparation of technical specifications
- Ability to work efficiently both in a team and independently
- Familiarity with MS-Office programs
- Fluency in written and spoken English

Desirable:

- Familiarity with project management tools and software
- Experience in project management, ideally in an engineering environment
- Experience with life cycle analysis of technical components or products
- Fluency in written and spoken Spanish

Conditions:

- Duration: 3 year labour contract with Spanish Social Security.
- Workload: 40 hours/week with flexible schedule.
- Gross salary: ~58 K€/year nonnegotiable.

Procedure:

Application letters, including CV and at least one recommendation letter should be sent by email to Sara Strauch (sara.strauch@ifae.es) until February 15th 2011 at 17:00 CET. The decision on the position will be taken not later than March 1st 2011.

Bellaterra (Cerdanyola del Valles), January 14th 2011.

A handwritten signature in blue ink, appearing to read 'Manel Martinez', with a horizontal line extending to the right.

Manel Martinez
for the CTA-Spain consortium