



cherenkov
telescope
array

the observatory for
ground-based
gamma-ray astronomy

The Cherenkov Telescope Array (CTA) is an international effort to build the next generation ground-based observatory for gamma-ray astronomy at very-high energies with more than 100 telescopes located in the Northern and Southern hemispheres. About 200 research institutions from 32 countries conceived CTA and are involved in designing and prototyping.

The Cherenkov Telescope Array Observatory (CTAO) with its Project Office in Bologna (Italy) is responsible for the construction and operation of the two CTA observatory sites, one in the Northern hemisphere on La Palma (Canary Islands, Spain) and one in the Southern hemisphere in Chile, as well as the Science Data Management Centre in Berlin-Zeuthen (Germany). CTA will be the world's largest and most sensitive instrument for high-energy gamma-ray astronomy with the detailed design and preparation well underway. It will be built with a significant amount of in-kind contributions from participating institutions.

For its Project Office in Bologna (Italy), the CTAO is seeking a

CTA Project Scientist

As a member of the CTA Observatory (CTAO) in the construction and operations phases, the CTA Project Scientist has a key role in all science related aspects of CTA construction and operation. He/she will work with the CTA Project Manager (Head of the Project Office) and System Engineers, and in contact with In-Kind Contributors and the CTA Consortium to ensure that the design, implementation and science verification of CTA achieves the science goals of the project. He/she will be member of the CTAO Change Control Board.

The CTA Project Scientist is expected to engage with the global science community and in particular to serve as an advocate of the CTA Observatory with the gamma-ray astronomy and the broader astronomy and physics communities. It is expected and encouraged that the Project Scientist be an active researcher with an interest in the key science areas to be explored by CTA.

Main Duties and Responsibilities

- Complete, define, refine and maintain the top-level CTA science requirements
- Establish and ensure completeness of the scientific requirements for the CTA system, working in conjunction with systems engineering and the domain coordinators
- Provide the scientific oversight in the process of translating scientific goals into technical specifications
- Set scientific requirements for CTA science operations and develop the plan for science operations together with the Science Operations Coordinator
- Be responsible for establishing the overall CTA calibration strategy and contribute to array commissioning and science verification planning and implementation
- Develop a science perspective on any major technical/ cost/schedule/science trade-off brought forward by the project and assess the impact on the CTA science case
- Participate in CTA reviews representing and safeguarding the CTA science goals
- Engage and work with the CTAO technical teams, and - as needed - with the In-Kind Contributors and the CTA Consortium to ensure that CTA will deliver maximal science within the existing boundaries and constraints

- Serve as a resource and point of contact on CTA science to CTAO Outreach, the hosting organizations, in-kind contributor institutions and the broader scientific community

Reports to:

The CTA Project Manager in Bologna.

Qualification and Experience:

CTAO seeks a scientist who is well connected to the field of gamma-ray astronomy and has relevant experience for the position. Applicants should have:

- A Ph.D. in astronomy, astrophysics, astroparticle physics, or a related field
- Observational and instrumental experience in ground-based gamma-ray astronomy
- In-depth knowledge of one or several scientific fields of gamma-ray astronomy
- At least five years of experience in an astronomical institution
- A record of scientific and technical publications

Key competences:

- The ability to work effectively in an international, multi-cultural and complex project environment
- Outstanding teamwork skills including the ability to integrate in a large team of high-level experts
- Outstanding communication and diplomatic skills, allowing to effectively communicate within the CTA project and with the community
- Excellent command of the English language; additional knowledge of Spanish and/or other European languages would be an advantage
- The ability to build strong and effective links locally within the Project Office and externally with the contributing partners and the CTA Consortium

Remuneration and Contract:

CTAO offers an attractive remuneration package including a competitive salary.

The contract is an open term contract subject to successful completion of the probation period.

Duty Station:

CTAO Project Office in Bologna, Italy, with regular travel.

Application:

Applications in English with a cover letter, full CV and publication list should be sent to recruitment@cta-observatory.org, indicating position reference "CTA Project Scientist" and the names of three referees with contact details.

By submitting applications candidates acknowledge we might contact referees at any stage of the process without prior notice.

CTAO is an equal opportunity employer. For more information, please visit www.cta-observatory.org or contact the CTA Project Manager Dr. Wolfgang Wild, wolfgang.wild@cta-observatory.org.

Closing date: 08 February 2019