SKA ORGANISATION Job Particulars SKA Project Scientist(s) Application deadline: 15th May 2013

Competitive Salary and Flexible Benefits

Job Title: SKA Project Scientist(s)

Reference: PS02

Reports To: SKA Science Director

Closing Date for applications: Closing date for receipt of completed applications is

15th May 2013. For details of how to apply please see below. **Submission of applications:** Email to jobs@skatelescope.org

Organisation Background

The Square Kilometre Array (SKA) is a global project to build a multi-purpose radio telescope that will play a major role in answering key questions in modern astrophysics and cosmology. It will be one of a small number of cornerstone observatories around the world that will provide astrophysicists and cosmologists with a transformational view of the Universe. The SKA will be constructed in two distinct phases. The major science goals for the first phase, SKA1, will be to study the history and role of neutral Hydrogen in the Universe from the dark ages to the present-day, and to employ pulsars as probes of fundamental physics.

Since 2008, the global radio astronomy community has been engaged in the development of the SKA as a major part of the 'Preparatory' phase of the project. The Preparatory phase ended in December 2011 and, following a number of major changes, the international SKA project has now progressed to the 'Pre-Construction' phase (2012-15) with the establishment of a new legal entity, the SKA Organisation, on 14 December 2011. Ten governments are now participating in the project, with others engaged in discussions concerning possible membership. The SKA Organisation is now headquartered in a purpose-built building at Jodrell Bank Observatory in Cheshire, UK.

General Description

The Office of the SKA Organisation ("SKA Office") will lead the SKA system design and oversee the detailed design being undertaken within the globally distributed SKA work packages (WPs). To accomplish this goal the SKA Office is employing highly qualified scientists and engineers, project managers and system engineers. Work packages for the major SKA subsystems (elements) will be contracted to a small number of work package consortia who will be responsible for the management, execution and delivery of the work packages. The technical strategy and philosophy of the project are strongly based on system engineering principles.

SKA Project Scientist(s)

We are seeking applicants for up to three (3) Project Scientist positions. The Project Scientist(s) will report to the SKA Science Director as part of a small, highly competent Science Team. They will form a critical part of the SKA Office team leading the detailed design of the SKA. They will work with system engineers and project managers in the SKA Office, and with colleagues in the work-package consortia to ensure that the

emerging design of the SKA is compatible with achieving the ambitious science goals of the project.

The Science Team is expected to engage with the global science community and serve as advocates of the SKA within both the radio astronomy and the broader astronomical community and provide a conduit to understand and contribute to the science goals of the SKA. It is expected that the Project Scientists will be active researchers, with an interest in the key science areas to be explored by the SKA.

Within the SKA Office, the Project Science Team is expected to

- lead the development of the SKA science requirements and play a major role in the development of the concept of operations,
- lead the effort to evaluate technical trade-offs against the science requirements and assess the impact on the SKA science case,
- provide the scientific oversight in the process of translating scientific goals into technical requirements,
- engage and work with the SKA Office technical teams to ensure that the SKA will deliver maximal science within the boundaries and constraints of the project.
- 25% of time will be available for research.

Essential qualifications, experience, and attributes:

- a PhD or equivalent, in astronomy, physics, or closely related field,
- research experience at postdoctoral level,
- experience with large astronomical science projects
- ability to form an effective interface between science and engineering teams,
- good communication skills,
- demonstrated experience of ability to present SKA work in international and other forums.
- ability to work effectively with SKA scientists from a variety of cultures
- willingness to travel on behalf of SKA Organisation.

For more information on the SKA project visit http://www.skatelescope.org. The SKA Organisation offers a competitive salary, a generous company pension scheme, annual bonus and a flexible benefits package. The successful applicant's workplace will be located at the SKA Office's new headquarters in Jodrell Bank Observatory.

How to apply:

Please send a CV and covering letter to jobs@skatelescope.org, quoting reference PS02. Applications should include a summary of scientific accomplishments, project experience a resume and the names of at least three professional references. Closing date for receipt of applications is 15th May 2013.