# SKA ORGANISATION Job Particulars SKA Project Scientist Application deadline: 29<sup>th</sup> Feb 2016

# **Competitive Salary and Flexible Benefits**

Job Title: SKA Project Scientist

Reference: PS04

Reports To: SKA Science Director

Closing Date for applications: Closing date for receipt of completed applications is 29<sup>th</sup> Feb

2016.

Submission of applications: Email to jobs@skatelescope.org. See final paragraph for details of

how to apply.

Location: SKA Organisation, Jodrell Bank Observatory, Cheshire, UK

# **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. Some of 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 (2012-17) 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") leads the SKA system design and oversees 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) have been contracted to a number of work package consortia who are 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

We are seeking applicants for one Project Scientist position to add to the current team of Project Scientists. The Project Scientists report to the SKA Science Director as part of a small, highly competent Science Team. They form a critical part of the SKA Office team leading the detailed design of the SKA. They work with system engineers and project managers in the SKA Office, and with colleagues in the work-package consortia and the global science community to ensure that the emerging design of the SKA is compatible with achieving the ambitious science goals of the project.

We particularly encourage applications from female applicants, who are currently underrepresented on the Science Team.

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 are 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.
- Undertake any other reasonable duties as directed by the post holder's line manager or a member of SKA Organisation Senior Management Team.
- 25% of time will be available for research.

Essential qualifications, experience, and attributes:

- a PhD or equivalent, in astronomy, physics, or closely related field,
- significant research experience at postdoctoral level,
- experience with large astronomical science projects,
- ability to form an effective interface between science and engineering teams,
- good English oral and written communication skills,
- demonstrated experience of ability to present SKA work in international and other forums,
- ability to work effectively with SKA engineers and scientists from a variety of cultures, and
- willingness to travel, nationally and internationally, and work outside normal business hours, including evenings and weekends;

For more information on the SKA project visit <a href="http://www.skatelescope.org">http://www.skatelescope.org</a>. The SKA Organisation offers a competitive salary, a generous company pension scheme and other benefits. 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 (including your current remuneration) and covering letter to jobs@skatelescope.org, quoting reference PS04. 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 29 Feb 2016.

# **Equal Opportunities Statement:**

SKA Organisation is committed to being an equal opportunities employer. Our aim to is recruit and retain the most talented individuals, regardless of gender, race, disability, age, sexual orientation, religion or nationality.

At all stages of the recruitment process and beyond, we strive to treat applicants and employees with a high standard of care, honesty and politeness.

Women have traditionally been under-represented in the fields of science and engineering; SKA Organisation welcomes and encourages female applicants.

Where applicants with a disability need facilities or adjustments to enable them to participate in the recruitment process, these will be provided. If you need equipment or adjustments to enable you to complete your application and/or attend an interview then please let us know.