

**THE UNIVERSITY OF MANCHESTER**  
**FACULTY OF ENGINEERING AND PHYSICAL SCIENCES**  
**SCHOOL OF PHYSICS AND ASTRONOMY**

**Six Senior Engineering Positions in the SKA Program Development Office**  
**(initial appointments for up to three years)**

The Square Kilometre Array (SKA) is under development as a next-generation radio astronomy facility for the global astronomy community. More than fifty institutes in nineteen countries are partners in a collaborative research and development program toward construction of the SKA. The SKA Program Development Office (SPDO) was established by the precursor to the SKA Science and Engineering Committee in January 2003 to focus international efforts in the project and, in particular, to develop the science case, engineering system design, site proposal process and assessment, operational plan, and telescope performance simulation, as well as being responsible for scientific and public outreach. In this effort the SPDO works closely together with highly qualified scientists and engineers at leading regional radio astronomy institutes around the world.

Technology development for the SKA is being undertaken within a number of regional Pathfinder telescopes and Design Studies. To complement these efforts a 15-person Central Design Integration Team (CDIT) will become operational starting in 2008 as part of the SPDO under the direct leadership of the International Project Engineer. The CDIT will be responsible for the SKA system design and will draw together the technology developments and insights generated within regional SKA projects. In particular, the CDIT will produce a top-level, costed SKA design and a detailed design (including an Initial Verification System) for SKA Phase 1.

Australia and Southern Africa have been short-listed as acceptable sites for the SKA. In view of the importance of site selection, a number of additional studies need to be carried out in order to further characterize the sites before the final selection of the site. These studies, together with additional site engineering projects, will be undertaken by the SPDO and regional partners over the next few years.

In 2008, the SPDO wishes to appoint

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| 1. | <b>CDIT Program Manager (PREPSKA)</b>                                    | <b>Reference: EPS/80209</b> |
| 2. | <b>CDIT System Engineer (PREPSKA)</b>                                    | <b>Reference: EPS/80210</b> |
| 3. | <b>CDIT Domain Specialist in Signal Processing (PREPSKA)</b>             | <b>Reference: EPS/80211</b> |
| 4. | <b>CDIT Domain Specialist in Signal Transport and Networks (PREPSKA)</b> | <b>Reference: EPS/80212</b> |
| 5. | <b>CDIT Domain Specialist in Computing and Software (PREPSKA)</b>        | <b>Reference: EPS/80213</b> |
| 6. | <b>CDIT Domain Specialist in Receptors (PREPSKA)</b>                     | <b>Reference: EPS/80218</b> |

Tasks and selection criteria for these positions are provided individually via the University of Manchester link given below.

#### **Terms and Conditions**

The CDIT and site engineering activities will be supported as part of the SKA Preparatory Phase study to be funded under the European FP7 program, augmented by contributions from regional SKA partners. All positions will be based at the Jodrell Bank Centre for Astrophysics in Manchester (UK), the host for the SPDO in the period 2008-2012. Secondment from the applicant's home institution is encouraged. The appointment period for all positions is up to three years. Funding is being sought for an extension of this period. Successful applicants will be able to take up their positions immediately.

Further information can be obtained from Prof. Richard T. Schilizzi, Director, SKA Program Development Office, email: [schilizzi@skatelescope.org](mailto:schilizzi@skatelescope.org), tel: +44 (0)161 2754055, or Dr. Peter E. Dewdney, International Project Engineer, SKA Program Development Office, email [ped@drao.nrc.ca](mailto:ped@drao.nrc.ca), tel: +1 250 4904322.

Application forms and further particulars of the individual positions are available from our website <http://www.manchester.ac.uk/jobs/academic>. If you are unable to go online, you can request a hard copy of the details from EPS HR Office, The University of Manchester, Sackville Street Building, Manchester, M60 1QD, UK Tel: +44 (0)161 275 8837; Fax: +44 (0)161 306 4037 or email : [eps-hr@manchester.ac.uk](mailto:eps-hr@manchester.ac.uk).

Closing date: **15 April 2008**

***The University will actively foster a culture of inclusion and diversity and will seek to achieve true equality of opportunity for all members of its community.***

**Insertion details:** Publication(s)University website, [www.jobs.ac.uk](http://www.jobs.ac.uk); SKA website, [www.skatelescope.org](http://www.skatelescope.org)