Scientific & Technical Officer – F: Big Data Scientist

Pay Scale: Pay Level-L13 with starting basic pay of Rs.1,23,100/- with other allowances as per IUCAA norms

No. of Post: One (Unreserved)

Age Limit: 50 years (Relaxation for SC/ST/OBC & PH as per Govt. of India norms)

Qualification & Experience: At least B.E./M.Sc./MCA or equivalent degree in Physics / Computer Science or a related field with 10 years' experience or M.E. with 8 years' experience or Ph.D. with 6 years' experience in high level research / development activity of relevance to IUCAA in Physics / Astronomy / Astrophysics or a related field.

Job Description:
The Inter-University Centre for Astronomy and Astrophysics (**IUCAA**) is the key science stakeholder of the prestigious LIGO-India mega-science project and is responsible for the entire data computing facilities and its operation. IUCAA is looking for talented personnel to fill several permanent Scientific and Technical positions as big data scientists to design and implement High Performance/Throughput Computing infrastructure and allied analysis strategies which would be optimum in the context of gravitational wave detectors. These positions carry tenure and benefits of any central government employees in India. There is flexibility in the grades offered so as to be commensurate with the qualifications and work experience.

Gravitational Wave research is computationally intensive. Even though the international collaboration has built large state of the art computing facilities, analysis of data and numerical relativity simulations are currently computationally limited. This demands designing computing strategies and hardware infrastructure in an integrated manner to push the limits of computing facilities beyond their usual strength. The senior big-data scientist is expected to be involved in:

- Research for optimal, yet robust, hardware's for gravitational wave research
- Continuous planning and implementation of upgrades of computing hardware's
- Assist in setting up and lead a system administration team to
    - Monitor hardware health
    - Implement regular software upgrades
    - Set up and manage network issues
    - Address user specific issues (through ticketing systems)
    - Help users to get started
    - Write documentation whenever possible
- Evaluation of computing needs for research groups and justifiably allocate resources
- Advise researchers with huge computing demands on optimal usage of resources
- Set up and develop software layers for security and data sharing
- Coordinate computing activities and data sharing with international collaborators
- Oversee management of customized software repositories for LIGO Data Grid (LDG)
- Oversee management of auxiliary services (e.g., document servers, wikis, logbooks)
- Explore possibilities for funding and usability of shared national/international resources

Last date of application: August 31, 2018