

## ADVT. NO. : S/PHY/19/2013-14

Bose Institute, Kolkata, invites applications from Indian Citizens for two (02) temporary positions of <u>Junior Research Fellow</u> in the DST sponsored project entitled "ALICE-Operation and Utilization". Duration of the positions will be initially upto 31<sup>st</sup> March 2014. Details of qualification, fellowship, age etc. are as follows :

**Essential Qualification** : 1<sup>st</sup> class M.Sc. degree in Physics from a recognized University with CSIR-UGC NET-JRF or CSIR-UGC NET-LS / GATE qualification.

**Fellowship** : Rs. 16,000/- p.m., plus admissible HRA and Medical benefit for CSIR-UGC NET-JRF Rs. 12,000/- p.m., plus admissible HRA and Medical benefit for CSIR-UGC NET-LS / GATE.

Age : Below 28 years (relaxable in case of SC/ST/OBC/WOMEN candidates only as per rule).

Interested and eligible candidates should apply on plain paper quoting advertisement No. and position on the envelop as well as application with complete Bio-data giving e-mail ID / Phone No. and details of qualification i.e. examination passed, year, division, percentage of marks from Secondary onwards with attested copies of testimonials <u>on or before August 30, 2013</u> addressed –

To **The Registrar Bose Institute, P–1/12, C.I.T. Scheme VII-M, Kankurgachi,** <u>Kolkata – 700 054</u>

## JUNIOR RESEARCH FELLOW IN HIGH ENERGY PHYSICS GROUP <u>AT</u> <u>BOSE INSTITUTE, KOLKATA</u>

The high energy physics group at Bose Institute is involved in relativistic heavy ion collision experiment ALICE at Large Hadron Collider, CERN. In particular we are responsible for R&D for the proposed forward calorimeter to be included in the ALICE upgrade program.

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This new sampling type calorimeter will measure photons, pions and jets at the forward rapidities enabling access to the small-x physics at theses energies. Alongwith this we are taking part in the challenging task of development of a common readout unit (CRU) which will be used by all sub detectors in ALICE post a luminosity upgrade in LHC. The components for this must be radiation hard and based on FPGA technology. The fact that some of the detectors will ship data at a rate of more than 1 GBit/s on a single link to this CRU poses a challenge in terms of board design, layout and overall timing synchronisation.

We are also involved in analysis of the available data from the experiment after its running at several center of mass energies for the last two years. Several open problems in the area of heavy flavor physics and other topics are available for analysis.

The JRFs will be working in data analysis. Both the JRFs are also expected to take part in the detector R&D program as and when required.

For further information please contact : 2569 3109 or supriya@bosemain.boseinst.ac.in

## **REGISTRAR**