



University of the Witwatersrand, Johannesburg

2X Postdoctoral Research Fellowships (2015)

Keywords:

Experimental heavy-ion physics, ALICE, LHC; Johannesburg (South Africa); Postdoc

Description:

The ALICE group of the University of the Witwatersrand in Johannesburg, South Africa, is seeking to fill **two postdoctoral fellowships** on experimental heavy-ion physics with ALICE at the LHC, starting no later than 1 January 2015. The positions are initially for two years and are renewable annually based on performance. Extensions to three and even four years are possible depending on the availability of funding and performance.

The total value of the fellowship on offer is R 220 000 per annum and can be structured flexibly. Applications are invited on or before 30 September 2014.

The University of the Witwatersrand joined the ALICE collaboration in March 2014 and wants to establish a research group to participate actively in data analysis and online computing of the ALICE experiment. The group is headed by the co-founder of the South African ALICE programme, Prof Zeblon Vilakazi, and will collaborate closely with the ALICE groups at the University of Cape Town and iThemba Labs. Funding for extended research visits to CERN is available from the national SA-CERN programme.

The research areas will be aligned with the other South African groups, which contribute significantly to the High-Level Trigger and are now joining the online-offline, or O², computing upgrade project with a focus on the integration of the muon spectrometer and the transition radiation detector. These groups also work on data analysis related to muon and photon measurements as well as light-flavour particle production in ALICE.

The postdoctoral fellows are expected to work in ALICE on one of the following topics:

- Online-Offline (O²) Computing Upgrade
- Analysis of data using the Thermal Model and the Tsallis Distribution
- Muon production in p-p, p-Pb or Pb-Pb collisions
- Photon measurements as a probe of hot and dense matter

Minimum requirements:

Applicants must have:

- Completed their Ph.D. degree in nuclear or particle physics not earlier than 2010,
- Track record of producing research outputs, e.g. presentations at international conferences and publications in peer-reviewed journals, AND
- Experience in data analysis in heavy-ion or particle physics, OR expertise on online, high-throughput or high-performance computing.

Duties and Expectations:

- Undertake focused and high quality research,
- Support the academic programme related to the ALICE project.

Contact:

Applications should include a covering letter and a full academic CV and should be emailed to Prof Zeblon Vilakazi, in PDF format at Zeblon.Vilakazi@wits.ac.za before **30 September 2014**.

The University is committed to employment equity and equal opportunity, but is always focused on academic excellence. The University retains the right not to make an appointment and to verify all information provided by candidates.