

Post-Doctoral Research Position in Experimental Particle Physics

The Mechanical Engineering Science Department of the UNIVERSITY OF JOHANNESBURG, South Africa seeks to appoint a Post-Doctoral Research Fellow at its Auckland Park Kingsway Campus in the field of experimental particle physics. This project embraces the aspects of physics analysis and also some of the experimental aspects, including, modern sensors, high throughput data, big data, data visualization, machine learning and applications of these in medicine and industry, interfacing to venture capitalists and the market and the possibility of generating and registering new intellectual property.

The current physics analyses of interest: VBF Higgs to invisible, H/additional scalar $S \rightarrow Z_d Z_d / Z Z_d \rightarrow 4$ leptons/ 2l2j/ 2l2v.

The duration of the Post Doc funding is up to three years but renewable annually based on mutual agreement and university requirements. There is an opportunity to be involved in teaching and student supervision for candidates who would like to develop this aspect of their CV.

Applications are welcomed.

Please send your CV and two reference letters to the address below.

Requirements: A completed PhD degree in Engineering or Physics with a strong aptitude for coding in C++ and Python. The review of applications will begin immediately and continue until the position is filled.

Funding: (ZAR) R250k/year (non-taxed), full support of a 3 months visit per year to CERN , payment of the Authorship Fee

Enquiries: Dr Loan Truong and Prof SH Connell – Position open to 30-June-2025 mail: <u>ltruong@uj.c.za</u>, <u>shconnell@uj.ac.za</u> Web sites <u>http://www.uj.ac.za</u>, <u>https://panip.febe.uj.ac.za</u>, <u>http://physics.uj.ac.za</u>