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Technology Innovation Platform at NRF-iThemba LABS

The Technology Innovation Platform (TIP) at iThemba LABS, South Africa's national facility for accelerator-based sciences, aims to transform our nuclear and particle physics research into practical applications. We've set up TIP around several key technology projects in detector systems, data acquisition, specialised fabrication, and control interfaces. The work will include thick GEM detectors for the K600 spectrometer, systems based on XIA digitizers, electron beam welding techniques for niobium components, and EtherCAT solutions for our beam diagnostics. One of our main challenges is navigating the gap between the typically low Technology Readiness Levels of physics research and the requirements for commercial adoption. Despite these challenges, we believe TIP creates valuable pathways for physics innovation within South Africa's scientific landscape while supporting our core mission in nuclear physics research at iThemba LABS.

Apply for student award at which level:

None

Consent on use of personal information: Abstract Submission

Yes, I ACCEPT

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