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## Spectroscopy of proton unbound states in $^{32}\text{Cl}$ .

Thursday, 6 July 2017 14:00 (20 minutes)

The study of proton unbound states in  $^{32}\text{Cl}$  is important both in the context of nuclear structure and astrophysics. In this presentation we discuss the results from a recent experiment study of such states using the  $^{32}\text{S}(^3\text{He},t)$  reaction and the K600 spectrometer at iThemba LABS. Unbound protons from recoiling  $^{32}\text{Cl}$  nuclei were detected using the CAKE silicon array placed upstream of the target, while an attempt was made to detect weak gamma-rays from the relevant states using an array of NaI detectors.

**Apply to be considered for a student award (Yes / No)?**

yes

**Level for award (Hons, MSc, PhD, N/A)?**

MSc

**Main supervisor (name and email) and his / her institution**

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**Would you like to submit a short paper for the Conference Proceedings (Yes / No)?**

No

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