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# Structure in the Region of N=16: Follow up Studies to NP1106-SAMURAI04

*Monday, 7 September 2015 16:45 (25 minutes)*

Experiment NP1106-SAMURAI04 "Structure of 18,19B and 21,22C"was run in May 2012 as part of the SAMURAI DayOne campaign of experiments. As will be discussed briefly in the first part of this contribution, whilst the analysis is still underway, the data acquired have enabled a number of interesting results to be obtained for unbound states in the region of the N=16 sub-shell closure below doubly-magic 24O.
In the case of the search for the first 2+ state of 22C we have tantalizing evidence for a level around 2.5 MeV above the two-neutron threshold following single-proton removal from 23N. Our investigations of the N isotopes have allowed us to extend the known systems out to unbound 24N, whereby two-proton removal from 26F has been found to populate a single low-lying resonance-like structure.
Plans for a more definitive investigation of the 22C continuum states using the MINOS active target coupled with the NeuLAND+NEBULA setup and an improved 48Ca primary beam intensity will be discussed. In addition the prospects for undertaking a search for 23C and 25N will be presented.

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**Session Classification:** New proposals - 1