Abstract Submitted
for the DNP16 Meeting of
The American Physical Society

β-delayed neutron spectroscopy around N=82 with VANDLE[1]
MIGUEL MADURGA FLORES, CERN, ANDREA GOTTARDO, Universite Paris-Sud, ROBERT GRZYWACZ, University of Tennessee, VANDLE COLLABORATION, IDS COLLABORATION — The properties of nuclei close to magic numbers have become a reference for our understanding of nuclear structure. The β-decay of these nuclei offers a clean window to study both the properties of the parent and the daughter. Of course, a sizable fraction of the beta-decay of neutron rich-nuclei will populate neutron-unbound states in the daughter.
The Versatile Array of Neutron Detectors at Low Energy was developed at Oak Ridge National Laboratory for neutron spectroscopy following β-decay and nuclear reactions [1,2]. It consists in 50+ individual detector modules made of plastic scintillator to measure neutron energies using the time-of-flight technique.
Results from a recent campaign at ISOLDE, CERN, on the decay of r-process waiting points ^{130,132}Cd will be presented.
[1] S.V. Paulauskas et al. Nucl. Instr. and Methods A737, 22(2014).
[2] W.A. Peters et al., submitted.

[1]This research was sponsored in part by the National Nuclear Security Administration under the Stewardship Science Academic Alliances program through DOE Cooperative Agreement No. DE-FG52-08NA28552.

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Date submitted: 01 Jul 2016 Electronic form version 1.4