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Recent results from MoNA-LISA¹

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Studies of the nuclear properties of nuclei close and even beyond the limits of stability have revealed exotic modes of decay and new structural characteristics. The MoNA-LISA array is used at the National Superconducting Cyclotron Laboratory at Michigan State University to study nuclei along the neutron dripline. In a typical experiment, a radioactive beam is employed to produce the neutron-unbound state of interest. This state/resonance immediately decay into a neutron, which is detected by MoNA-LISA and a remaining charged nucleus detected by the sweeper magnet detector suite. In this talk, new exciting findings from recent MoNA-LISA experiments will be presented. These include the first observation of a dineutron decay from ^{16}Be , the exploration of the “south shore” of the Island of Inversion and the first evidence of the decay of the troubling nucleus ^{26}O .

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