

Abstract Submitted  
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**CHIPS Neutrino Detector Research and Development** RAMON SALAZAR, PATRICIA VAHLE, William and Mary, CHIPS COLLABORATION — The CHIPS R&D project is an effort to develop affordable megaton-scale neutrino detectors. The CHIPS strategy calls for submerging water Cherenkov detectors deep under water. The surrounding water acts as structural support, minimizing large initial investments in costly infrastructure, and serves as an overburden, shielding the detector from cosmic rays and eliminating the need for expensive underground construction. Additional cost savings will be achieved through photodetector development and optimization of readout geometry. In summer 2014 a small prototype of the CHIPS detector was deployed in the flooded Wentworth Mine Pit in Northern Minnesota. The detector has been recording data underwater throughout the fall and winter. In this talk, we will discuss lessons learned from the prototyping experience and the plans for submerging much larger detectors in future years.

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