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Abstract for an Invited Paper for the SES15 Meeting of the American Physical Society

First Results from the NovA Experiment¹ ALEXANDER RADOVIC, College of William and Mary

The observation of neutrino oscillation provides evidence of physics beyond the standard model, and the precise measurement of those oscillations remains an important goal for the field of particle physics. NO ν A will soon be one of the foremost experiments in that field. Taking advantage of a two-detector technique, a tightly focused off-axis view of the NuMI neutrino beam, and a pair of finely instrumented liquid scintillator detectors, NO ν A is in a prime position to contribute to precision measurements of the neutrino mass splitting, mass hierarchy, and delta cp. This presentation will describe the goals and design of the NO ν A experiment, show first results obtained whilst the detectors where still being constructed, and outline what to expect from NOvA in the coming years.

¹Collaboration - NOvA