

Abstract Submitted  
for the APR06 Meeting of  
The American Physical Society

**A Detector 2 km Away from the T2K Neutrino Source** KATE SCHOLBERG, Duke University, T2K 2KM COLLABORATION — We describe a detector array 2 km from the neutrino production target of the T2K experiment. At this distance, almost the same neutrino flux is measured as that seen at Super-Kamiokande, 295 km away. The detector consists of a 1 kton water Cherenkov detector, a muon range detector, and a 100 ton liquid argon TPC. We show how this detector may be used to study neutrino oscillations with the T2K beam and Super-Kamiokande.

Edward Kearns  
Boston University

Date submitted: 17 Apr 2006

Electronic form version 1.4