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Neutrino Induced Coherent  $\rho$  Production in a Fine Grained Tracker LIBO JIANG, CHRISTPHER KULLENBERG, XINCHUN TIAN, SAN-JIB MISHRA, Univ. of South Carolina, LBNE COLLABORATION — We present simulation of neutrino induced coherent  $\rho$ -meson production in charged and neutral current interactions. Sensitivity studies of this process is presented in a fine grain tracker, a near detector option for LBNE. Measurements of coherent  $\rho^0$  and  $\rho^+$ production in NOMAD are reported.

> Xinchun Tian Univ. of South Carolina

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