Abstract Submitted
for the DNP08 Meeting of
The American Physical Society

On the electroweak physics reach of the NuSOnG experiment
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I present on the electroweak physics potential of the proposed NuSOnG (Neutrino Scattering On Glass) experiment at Fermilab. NuSOnG's design and projected interaction rates suggest a unique physics program that can indirectly probe energy scales in excess of 5 TeV, comparable to that of the LHC! However, due to their weak current nature, neutrino scattering yields information complementary to conventional colliders in physics content. After introducing the general motivation for neutrino scattering at NuSOnG I move on to describe precision, multi-channel, measurements of Standard Model parameters. Next, I survey both direct and indirect searches for new physics via nonstandard neutrino couplings and potential Z prime interactions. This is supplemented throughout by a discussion of example models that may be constrained by this experiment.

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Date submitted: 30 Jun 2008 Electronic form version 1.4