Abstract Submitted
for the APR10 Meeting of
The American Physical Society

Cosmogenic ^9Li Production in Double Chooz MATTHEW TOUPS, Columbia University — Measuring a non-zero value for the neutrino mixing angle θ_{13} sets the scale for future precision measurements in the lepton sector such as CP violation. The search for θ_{13} at nuclear reactors depends crucially on understanding the backgrounds to the inverse beta decay delayed coincidence signal. Due to its long lifetime and $\beta - n$ decay branches, cosmogenic ^9Li is expected to be one of the most important sources of background. Recent measurements of ^9Li production yields are extrapolated to Double Chooz depths and compared to fits based on CHOOZ data.

Matthew Toups
Columbia University

Date submitted: 23 Oct 2009 Electronic form version 1.4