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Double Chooz: The Search for θ_{13} and Outer Muon Veto Work at Nevis
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We present preliminary studies for the crosstalk of the Hamamatsu M64 photomultiplier tube for use in the outer muon veto system in Double Chooz. The study tests an alternative method to isolate crosstalk in 64 anode photomultiplier tubes with the use of a mask. Double Chooz seeks to measure the smallest of the mixing angles in the leptonic sector, θ_{13} . If θ_{13} is very small, Double Chooz will set an upper limit of $\sin^2 2\theta_{13} < 0.03$ within three years of operation of both detectors, almost a factor of 10 improvement from the Chooz upper limit of $\sin^2 2\theta_{13} < 0.2$.