

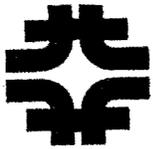
STUDY OF DIMUON EVENTS PRODUCED IN NEUTRINO INTERACTIONS

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F.S. Merritt, F.J. Sciulli, L. Strutte, H. Suter (Caltech);
E. Fisk and G. Krafczyk (Fermilab)

This proposal is an outgrowth of E356 and represents that part of the experiment directed to the detection of dimuon events. The experiment will be carried out in Lab E and will be done with a subset of the apparatus being constructed for E356.

With the quad beam focus set to 200 GeV, in a 75 ton fiducial volume (of the full volume of 170 tons), the charged current rate will be about 1 event/minute for $E_\nu > 100$ GeV at 10^{13} ppp and 10 second repetition rate. For a 1% dimuon rate, they feel a realistic goal might be 250 dimuon events/month.

Summary prepared by
J. Lach, May 1976



Fermilab

May 11, 1976

Ref: #356, #379, #482

To: D. Bart, M. Paul

From: T. Groves *TG*

Subject: Creation of Proposal File for Lab E Dimuon Experiment

Please establish a proposal file with the number 482. The principal documents in the file are all from the E-356 file. The first correspondence item should be the letter to E. Goldwasser from Frank Sciulli and Barry Barish dated October 30, 1975. The second correspondence item should be the letter to E. Goldwasser from Barish and Sciulli dated November 10, 1975. The third item should be E. Goldwasser's response dated November 25, 1975. There will be no proposal in the E-482 file but the one-page summary recently prepared by J. Lach should go in that position in the folder. This memo should go in the usual place in the last section.

PROPOSAL #
MASTER
DO FILE
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JRS

356, 379, 482