

CERN LIBRARIES, GENEVA



CM-P00045352

CERN/SPSC/80-114
SPSC/M264
October 27, 1980

M E M O R A N D U M

To: Members of the SPSC
From: WA1 Collaboration
Subject: WA1 test calorimeter run in the North Area

The WA1 neutrino detector modules and the WA1 test calorimeter have been calibrated using the S3 hadron beam in the West Area. This beam is presently limited to hadron energies up to 140 GeV.

For neutrino energies of 300 GeV (data taken in the 300 GeV NBB in Spring, 1980) and 370 GeV (NBB operation to come in 1982) an extrapolation of the hadron energy calibration from 140 GeV to 300 GeV or 370 GeV, respectively, is required. In order to avoid systematic uncertainties due to this extrapolation we would like to measure the response of the test calorimeter in the energy domain 140-370 GeV using the hadron beam facilities of the North Area.

We request:

- Hadron (π^-) and electron beams at eight different energies between 50 and 370 GeV; the lower energies provide an overlap with the previously measured energy domain 10-140 GeV.
- A long extraction (~ 1 sec) with 100-300 particles/burst.
- An experimental area (8 m along the beam and 5 m wide) and a ventilated counting room (4×4 m² not more than 35 m from the experimental area) to house electronics and computer.
- A total of five days beam time in June, 1981.