

### 13. Status

The experiment completed taking data in September 1997. A total of  $4.5 \times 10^{17}$  protons of 800 GeV energy were interacted in a beam dump to produce the tau neutrinos. An estimated  $69 \pm 24$  interactions are recorded in the emulsion stacks.

In the past year, the analysis of the data has shifted from electronic reconstruction of the spectrometer data to the extraction of the emulsion data for the interactions identified by the detectors in spectrometer. Much effort has been spent in developing emulsion scanning techniques necessary for insuring high efficiency in locating the interactions in the emulsion.

The electronic reconstruction and the selection of neutrino interaction candidates are complete. The decay search for the characteristic kink signature is presently underway using the digitized emulsion data, in much the same way as the analysis of electronic detectors. Most of the neutrino interactions are  $e$  or  $\mu$ , of course, but we expect about 5% to be  $\tau$  if the located sample is unbiased.

As of 15 Nov 1999, 203 events have been unambiguously located in the emulsion data out of 414 interaction candidates, selected out of 901 events. In addition, 105 events have been scanned but not yet processed for location, and approximately 110 more events are waiting to be scanned (followed by attempted location). The location efficiency, is now 60%, and therefore we expect about 130 more events to be located from this sample that is tagged for analysis. An additional 200 events could be located later, but have been excluded from the present sample for various reasons ( e.g. high background, emulsion damage, low primary multiplicity, etc.)

Although the collaboration had submitted a Proposal to run in the next 800 GeV fixed-target run, we have decided *not* to run in 1999 and concentrate on the analysis of the 1997 data. We would like to complete the analysis on at least 300 events before announcing more results. To this end, we will need to upgrade all the large scanning stations at Nagoya with the high-speed track selector electronics. This will make possible a timely completion of the data analysis for the experiment.

