

## MACHINE TIME EXECUTION

## REPORT ( 2002-4-1 CYCLE)

Experimental Group	E522	Reporter	C.J.Yoon
Scheduled Period and Shift	10/29 - 11/19	Main, Sub, Para	

## Experimenters

H.Funahashi, K.Imai, K.Miwa, N.Saito, C.J.Yoon (Kyoto Univ.)  
M.Ieiri, H.Takahashi (IPNS, KEK), T.kishimoto, T.Hayakawa (Osaka Univ.),  
A.Sato (Osaka Univ.), K.Yamamoto (Osaka City Univ.), K.Nakazawa (Gifu Univ.),  
S.J.Kim (Pusan Nat'l Univ.), J.Asi, M.Kurosawa (SUT)

## SUMMARY OF EXECUTION AND RESULTS

First weeks of this cycle, we did check whole of the spectrometer, and adjusted the timing of the counters using 1.67 GeV/c pi-. From the second week, we start data taking for the purpose of checking analysis program. At the same time, we also tuned brightness of SCIFI image. For the physics run, data taking was start from 13 Nov. with 1.67 GeV/c K- beam. At the beginning of the run, K- intensity was about 0.7 E4/spill. In order to increase beam intensity we have studied mass slit, and production target. And we have requested A > C mode, partially. As the result, It was possible to get more than 2.0 E 4 K- per spill. To the end of this cycle, injected K- beam on the SCIFI detector is 7.4 E 8. Expected number of (K-, K+) reaction is 1480 events. Fig.1 shows typical mass spectrum of this cycle, Fig.2 shows a candidate event of 2-lambda emission from (K-, K+) vertex point.

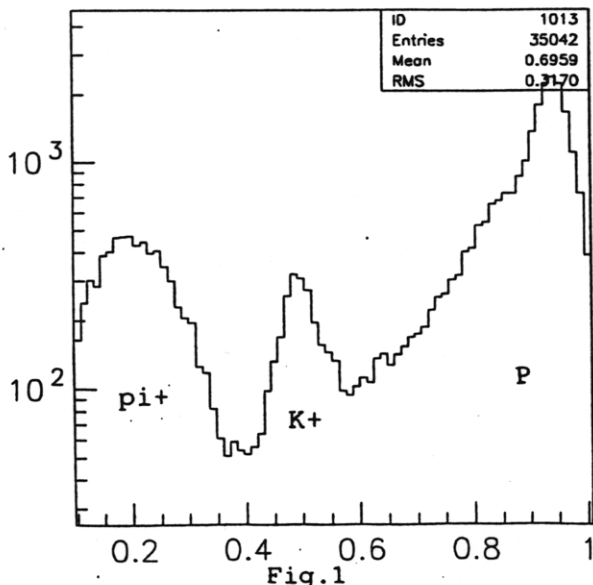


Fig.1

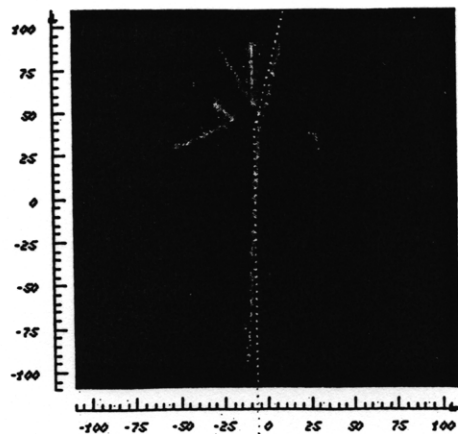


Fig2.

## EXECUTED MACHINE TIME, BEAM CONDITION, DOWN TIME etc.

We have excuted 33 shift in this cycle for our purpose.  
18.19 shift was for detector tuning, remained 14.81 shift was for (K-, K+) physics run.

We have lost 12 shifts due to BSTR EXT Kicker down in total 45 shifts of this cycle.