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I. Ten Have
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IPP meeting

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- Inclusive D^0 and D^+ to K^0 and K^+ branching ratios: HVFL versus PDG - Paul Colas.

  In connection with the K^0 -ln(x) spectrum Gerald suggested to look at the $D^+ \rightarrow$K decay, as incorrect branching ratios there may be a source of difference between the data and the HVFL03 MC. Paul found that the decay $D^+ \rightarrow K^-$ may have a little more kaonless decays (20.8 PDG versus 28.5 sum of exclusive decays HVFL04). A big difference is seen on $D^0 \rightarrow K^0$: 42 $\pm$ 5 % (PDG) versus 27.2 (HVFL04) and on $D^0 \rightarrow K^-$: 46 $\pm$ 4 % (PDG) versus 64.1 % (HVFL04). Obtaining matching between the sum of the exclusive decay channels and the inclusive one is a non-trivial excercise. Work on this point is in progres.

- Photons from conversion pairs - Frank Stephan.

  In preparation for the DPG details were shown on this analysis. Pairfinding based on QPAIRF (for details on selection see transparencies) is shown to give a detailed picture of the material distribution inside the detector. Also the crude modelling of the VDET material in the 1991 Monte Carlo shows up clearly when a MC-data comparison is made. A photon energy resolution of The effiency correction is evaluated for low and high radius separately. On average the data has 6.92 $\pm$ 2.5% (stat.) $\pm$ 5.0% (sys.) photons per event. This is to be compared to 7.100 in HVFL02, 7.108 in Jetset and 7.085 in Herwig; these numbers have a statistical error of 0.03 % on them. The comparison of the corrected data spectrum (-ln(x)) to the Monte Carlo models shows a discrepancy at the low momentum side. It is not clear whether this represent a problem.

- Σ^0 and ρ^0 studies - Armin Böhrer.
  For the Σ^0 the decay $\Sigma^0 \rightarrow \Lambda^0 + \gamma$ is studied. Armin started by expressing some worries having used the 1991 Monte Carlo too, which has Vdet material modelling problem. In the 1991 + 1992 data he finds 90 $\pm$ 17 (stat.) $\pm$ 12 (sys.) Σ^0's which corresponds to 0.072 $\pm$ 0.014 (stat.) $\pm$ 0.010 (sys.) per event. This is to be compared to 0.075 in HVFL03, 0.060 in Jetset, 0.062 in Herwig. Comparing the Chi (dss) rate as measured

by Robert Johnson ($0.0273 \pm 0.0013 \pm 0.0016$) with the Σ^0 (uds) rate, he extracts a strangeness suppression of 0.38 ± 0.08 (stat.).
On the side of the ρ^0 studies Armin showed his improved understanding of the implementation of the Bose-Einstein correlations. Including the lin(Q) terms in the form of an interference term is very important. This interference term is a function of x, it is 1 at low x and drops to 0 at high x. The stability of the ρ^0 fit improves greatly with respect to the case where lin(Q) was not taken into account. The number of ρ^0's is stable as a function of x when comparing a Breit-wigner shape with the Lund shape. Also the ratio of ρ^0-rates in data and MC is now yields compatible results when the omega is coupled to the ρ or left free in the fit. And last but not least, Armin showed the understanding now in terms of the mass($\pi^+\pi^-$) rather than the mass difference spectrum and gave both the ρ^0 and f^0 spectra as a function of x. These correspond to an integrated ρ^0-rate of $1.57 \pm 0.06 \pm 0.24$ ($m_\rho < 2$ GeV) and a f^0-rate of 0.15 ± 0.02.