Analysis plans:

**K*(892) production in central Pb-Pb collisions at 20, 30, 40, 80, 158 AGeV**

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-status at 158 AGeV
-work plan
Status at 158 AGeV

• Th. Sammer: Production of the K* and anti K* mesons in pp and PbPb collisions at the CERN SPS
• V. Friese: Production of Strange Pesonances in C+C and PB+PB collisions, prepared for 15th International Conference on Ultrarelativistic Nucleus-Nucleus Collisions (QM 2001)
• Unpublished results of In Kwon Yoo on K* production in central PbPb collisions
Thomas Sammer’s results

part one
Thomas Sammer’s results

Fig. 1. Background subtracted invariant mass spectra of the anti K* for the six centrality bins in PbPb collisions. The bin nr 6 is for the most central collisions.
Thomas Sammer’s results

Fig. 2. $p_T$ - and $y$- distributions for the anti K* in central PbPb events
Thomas Sammer’s results

Fig. 3. Anti K* yields per event and comparison to pion yields as a function of the number of participants.
In Kwon Yoo’s results
3 M Pb+Pb at 158 AGeV

\[ K^* \rightarrow K^+ + \pi^- \]

\[ K^* \rightarrow K^- + \pi^+ \]
Work plan

past:
  • february 2003: one week in IKF/GSI (In-Kwon Yoo software taken over)
  • march 2003: understanding event and track cuts

future:
  • april 2003: try to get a first signal at 40 AGeV
  • continue with other energies
  • work on corrections for spectra