Experimental Information: What Is Expected ?

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Outline

1. Running experiments
2. What information is interesting?
3. Conclusions

Running or Recent Experiments

- Novosibirsk: CMD-3. KEDR, SND running;
  CMD-2, SND at VEPP-2M over, but data are still accessible
- SLAC - BaBar over, but analysis is still ongoing
- KEK - BelleII running, Belle over, but active analysis
- LNF, Frascati: KLOE, KLOE-2 over, analysis ongoing
- Beijing: BESIII running, very active
- CLEO/CLEOII over, with one group still analyzing data
- Four LEP experiments – probably no chance

Information

1. $e^+e^- \to$ hadrons cross sections
   - Cross sections (total, differential)
   - Uncertainties (statistics, systematic effects, covariance matrix)
   - Amplitude analysis
2. Cross sections for HLbL: $\gamma\gamma \to$ hadrons,
   $e^+e^- \to \pi^0(\eta)\gamma$, $e^+e^- \to \rho\pi,\ \omega\pi,\ \eta\pi\pi$
3. Data for Dalitz plot analyses
4. Ideally, four-vectors keep maximum information

Publication Activity

- Novosibirsk - 21
- BaBar - 17
- Belle 62, BelleII - 1
- KLOE/KLOE-2 - 5
- BESIII - 62

Instead of Conclusions

Possibles extensions:

- τ-lepton studies: hadronic spectrum
  is interesting for CVC tests, α_s, $|V_{us}|$, ...
- Data about resonance shape, e.g. for X(3872) at LHC
- Could it be interesting for PWA, e.g. COMPASS?