

Minutes of the Hyperon Meeting Friday November 7th, 2014

Participants:

André Goerres (Juelich)
Jacek Biernat (Cracow)
Albrecht Gillitzer (Juelich)
Elisa Fioravanti (Ferrara)
Michael Papenbrock (Uppsala)
Dariusch Deermann (Juelich)
Simone Esch (Juelich)
Alicia Sanchez Lorente (Mainz)
Karin Schönning (Uppsala, chair)

1. Round-the-table presentation: everyone introduced themselves with name, institute and hyperon interest.

2. Presentation by Jacek Biernat: The $p\bar{p} \rightarrow \Lambda\bar{\Lambda}$ reaction was studied at 4 GeV to benchmark the FTS. The April 2013 release of Pandaroot was used and the analysis was performed using two different generator models:

- 1) Isotropic Λ angular distribution but where the Λ decays according to HELAMP.
- 2) Forward peaking (parametrised from real LEAR data) but phase space Λ decays.

Realistic pattern recognition was used in the reconstruction.

The two different models give, as expected, very different results: the forward peaking model gives a very low Λ yield due to slow pions not reaching outside the STT. Without the FTS the yield is zero since also the fast, forward going Λ bars escape detection.

Details can be found here:

<https://panda-wiki.gsi.de/foswiki/pub/Physics/Baryons/WebHome/lambdass.pdf>

3. News from the Scrutiny Group:

The message from the SG is that we from now on can assume that the full detector setup (except maybe some PID detectors) will be available from the start-up, although the time of the start-up may be delayed.

The focus in the near future will therefore be on which physics that can be done with PANDA from day one, with reduced luminosity, rather than which sub-detectors that are needed.

It is important that we demonstrate to the outside world what makes PANDA unique.

Karin Schönning gave a (shortened) version of a presentation given at the last SG meeting:

https://panda-wiki.gsi.de/foswiki/pub/Physics/Baryons/WebHome/SG_hyperon_schoenning_short.pdf

4. The Collaboration meeting: For the first time, there will be one session dedicated to Hyperon reconstruction. This will, according to the present time-table, take place on Tuesday morning. Please communicate to Karin if you want to give a presentation.

5. The next meeting will be on Friday, November 28th, at 1 pm.