



UPPSALA
UNIVERSITET

Recent and ongoing hyperon activities

Karin Schöning

Hyperon session, PANDA collaboration meeting,
Jülich 2014-12-09



UPPSALA
UNIVERSITET

Recent activities

- Simulations of the $\bar{p}p \rightarrow \bar{\Lambda}\Lambda$ channel for Λ disk benchmarking (S. Esch, Jülich)
- Simulations of the $\bar{p}p \rightarrow \bar{\Lambda}\Lambda$, $\bar{p}p \rightarrow \bar{\Xi}^+\Xi^-$ and $\bar{p}p \rightarrow \bar{\Omega}^+\Omega^-$ for the scrutiny campaign (K. Schöning, Uppsala)

Ongoing activities

- Simulation study of $\bar{p}p \rightarrow \bar{\Lambda}\Lambda$ for FTS benchmarking
(E. Fioravanti, Ferrara, and J. Biernat, Cracow)
- Simulations of $\bar{p}p \rightarrow \bar{\Lambda}\Lambda$ for pandaroot performance studies
(K. Schönning, Uppsala)
- Simulations of $\bar{p}p \rightarrow \bar{\Lambda}_c^-\Lambda_c^+$ for feasibility studies (Dariusch Deermann, Jülich)
- Tracking of hyperons
(M. Papenbrock, Uppsala and J. Schumann, Jülich)
- Production of $\bar{\Lambda}\Lambda$ in nuclei (A. Sanchez, Mainz)
- Simulation of $\bar{p}p \rightarrow \bar{\Xi}^+\Xi^-$ for baryon spectroscopy studies



UPPSALA
UNIVERSITET

Planned activities

- Simulations of $\bar{p}p \rightarrow \bar{\Lambda}\Lambda$ for tracking performance
(W. Ikegami Andersson, Uppsala)
- Feasibility study of $\bar{p}p \rightarrow \bar{\Xi}^*\Xi$ for baryon spectroscopy
(A. Goerres, Jülich)
- Simulations of $\bar{p}p \rightarrow \bar{\Xi}^+\Xi^-$ and $\bar{p}p \rightarrow \bar{\Omega}^+\Omega^-$ for studies of hyperon spin observables (Uppsala)
- Inclusive hyperon production (V. Machalov, Protvino)
- The $\bar{p}p \rightarrow \bar{\Sigma}^0\Lambda$ channel and Σ^0 Dalitz decays
(J. Pettersson, Uppsala)