

## Milestones for Beam Development (starting 18-Mar-2013)

1. STT goes out (collimator stays in) and is positioned at  $z = -12.5\text{mm}$ . (8:00h. 18-Mar.)
2. Check intensity of the beam coming from polarised source with Münster settings. (at this stage polarisation is not important) (15:00h. 18-Mar.)
3. Decide whether stacking and cooling is needed to reach  $3\text{-}5 \times 10^9$  intensity.
4. ANKE at 0 degree and start of beam development (first with unpolarised beam).
5. Perform LEP measurement for polarised proton beam (R. Gebel).
6. Absolute polarimetry of the beam at all energies with EDDA with 5% accuracy.
7. ANKE at  $5.8^\circ$ , beam development:
  - fixing the flattops for each energy
  - $\eta$  measurement, special trigger for schottky in COSY timing (in every 10 s).
  - overcome the depolarisation resonances
  - development of “beam around target” cycles.
8. In the end of the beam development we should have:
  - Polarised cycles in sequence  $\uparrow \downarrow \uparrow \downarrow \uparrow \downarrow \dots$ 
    - after each cycle beam intensity to be reduced down to  $10^8$  and measure polarisation with EDDA (EDDA target pops up).
  - Unpolarised cycles from unpolarised source (separate time block for each energy)
  - Cycle length  $\sim 300$  sec if no stacking, otherwise optimum duty cycle
  - Schottky triggers in COSY timing (in every 10 s).
9. Check for STT safety
  - injection, acceleration, beam around target, intensity reduction for EDDA, ...
10. STTs go in.
11. Start normal data taking