

## Statusreport after Exp. S223 (21-MAY to 05-JUN-2007)

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Beam:  $^{36}\text{Ar}$  @ 680 A MeV, enriched gas in ECR source.

Max. intensity in SIS was ca.  $2.3 \times 10^{10}$ /spill, on target ca.  $1.7 \times 10^{10}$ /spill, transmission SIS-FRS 70%.

SEETRAM has large noise contribution on analog signal. Prevents adjustment of zero current (always zero).

Transmission of  $^{36}\text{Ar}$  beam (with Be-6347 target and Al-3038 S2-degrader) as well as of  $^{27}\text{P}$  fragments from S8 to Cave C was only ca. 30% instead of 70% predicted by MOCADI using "frstor3b-ta2" ion optics.

Be-8047 target could not be reached by target drive.

MWPC: see attached summary sheet

MW21: no anode signals (preamp broken? will be replaced on 05-JUN). Cathodes show very small signals, needs very high voltages. Should be replaced by a new high-gain MWPC.

Scintillators:

SC21: HV: -2200 V (L,R). 3 mm paddle at 250mm was used. Saw intense beam (300 kHz for 10 d). Should not be used for production runs.

SC81: HV-SC81L= -2050 V, HV-SC81R = -2200 V. 3 mm paddle at 124mm was used. Works well. Typical count rate was 6-10 kHz.

All SCI HV are limited to max. 2200 V. Is that necessary?

To do list:

- 1) Replace MW21 anode preamp
- 2) Try to remove noise from SEETRAM
- 3) Check target drive (Be-8047 target)