

**Status report after exp. S389 (7-10 Oct 2010)**  
Expert team (12.10.10)

Beam:  $^{64}\text{Ni}^{26+}$  @ 1341 MeV/u ( $B\beta=17.0003$  Tm),  $i_{\text{max}}=3 \cdot 10^7$  /spill, spill length = 10s.

TA-Matter: SIS-window    Ti    5  $\mu\text{m}$   
                  SEETRAM    (as stripper)  
Target            Be    1036 mg/cm<sup>2</sup>  
                                  TS2ET2:pos. 33

S2-Matter: no matter

S8-Matter:    TUM 41 (P10), TPC41, SC42 (0.1 cm),  
                  INFN Box (on air)  
                  2 Sci 0.5 cm each  
                  Si-box1 0.4 cm (total)  
                  Chrenkov-box 0.1 cm  
                  Si-box2 0.2 cm (total)  
                  Chrenkov-box2 1 cm  
                  Slits, SC41 (0.1 cm),

Beam aligned at all focal planes using CG up to S3 at higher intensity.

Detector	HV setting
MW11A	not used
MW21A	not used
MW22A	not used
MW31A	3000

Detector	HV setting
SC01	2000 V
SC21L	2300 V (not inserted for measurement)
SC21R	2300 V (not inserted for measurement)
SC42L	3000 V
SC42R	3000 V
TPC41	A: 879 V D: 2404 V
Music41C	8000 V (pre type B), max gain

SC41L	1900 V
SC41R	1900 V

Optics used is called RUN81-TA2B.SET.

Trigger used:

Sc41, Sc41 and coincidence Sc41 and Sc42.

Primary beam setting:

1.  $^{64}\text{Ni}^{26+}$   $E_{\text{SIS}} = 1083 \text{ MeV/u}$  ( $B\rho = 14.6497 \text{ Tm}$ )  
 $^{64}\text{Ni}^{28+}$  after Seetram up to S4
2.  $^{64}\text{Ni}^{26+}$   $E_{\text{SIS}} = 1105 \text{ MeV/u}$  ( $B\rho = 14.8529 \text{ Tm}$ )  
 $^{64}\text{Ni}^{28+}$  after Seetram, after Be(1036) up to S4,  $B\rho$  kept constant

S4 rate < 1 kHz

Fragment setting:

3.  $^{40}\text{Ca}^{20+}$ ,  $E_{\text{SIS}} = 1341 \text{ MeV/u}$  ( $B\rho = 17.0003 \text{ Tm}$ ),  $B\rho$  kept constant
4.  $^{50}\text{Cr}^{24+}$ ,  $E_{\text{SIS}} = 1341 \text{ MeV/u}$  ( $B\rho = 17.0003 \text{ Tm}$ ),  $B\rho$  changed
5.  $^{20}\text{Ne}^{10+}$ ,  $E_{\text{SIS}} = 1334 \text{ MeV/u}$  ( $B\rho = 16.9374 \text{ Tm}$ ),  $B\rho$  kept constant

S4 rate < 1kHz