```
29Al, 235MeV, p=25 Torr, B=0.95 Tesla, Ti=0.35 mg/cm<sup>2</sup>, Schiwietz, Thf=A1/2=-1.0 → Comment
00. .0001 .0 6. 29. 12. 00.0 0.0 EN,DE,NEN,MASS,Q,DM
2. 4. 28. 350. 7. Ti 13.
                         25.
                                 -0.074 0.153 -1
SHRT
             Correction (ENGE ?)
     0.
                 0.
                      1.
DIPOLE
              1st DIPOLE
      1.0
            1.0
                 1.0
                        2.0
                              LF1, LU1, LF2, DG1, MTYP
60.000 14.000 3.81
                      50.8
                             0.95 A, B, D, R, BF
40.0
      37.
            14.
                             PHI, ALPHA, BETA
0.0
      0.0
            0.0
                  0.0
                         -20.0
                               +20.0 NDX,B,G,D,XS1,XS2 5
            -10.0
                   10.0
                                     Z11, Z12, Z21, Z22 6
10.0
      -8.00
0.2049
       1.6821 -0.5654 0.4004 0.0011 0.1663 C01 --- C06
       1.9725 -0.7466 0.2897 -0.0591 0.0052 C11 --- C16
0.4952
0.0001
       0.214 0.0
                   0.0
                           0.294
                                  0.294 BR1,2;XCR1,2;DS1,2 9
-0.050 0.0185
                                    RAP1, RAP2
                                                   10
0.0
      -0.000 0.0
                   0.0
                          0.0
                                0.0
                                      0.0
                                             S02-S07 11
0.0
      +0.000 0.0
                    0.0
                          0.0
                                0.0
                                       0.0
                                             S12-S17 12
DIPOLE
              2nd DIPOLE
                        2.0
                              LF1, LU1, LF2, DG1, MTYP 2
1.0
      1.0
            1.0
                  1.0
14.000 60.000 3.81
                      50.8
                             0.95
                                  A, B, D, R, BF
            -19.
      35.
74.0
                             PHI, ALPHA, BETA
0.0
      0.0
            0.0
                  0.0
                         -20.0
                               +20.0 NDX,B,G,D,XS1,XS2 5
10.0
      -8.00
            -8.0
                    20.0
                                     Z11, Z12, Z21, Z22 6
       1.9725 -0.7466 0.2897
                               -0.0591 0.0052 C11 --- C16
0.4952
       1.2450 -0.5426 0.2332 -0.0545 0.0069 C01 --- C06
0.6149
0.214
       0.0001 0.0
                     0.0
                           0.294
                                  0.000
                                          BR1,2;XCR1,2;DS1,29
0.0
      0.0
                                 RAP1, RAP2
                                                10
      -0.000
                                             S02-S07 11
0.0
             0.0
                   0.0
                          0.0
                                0.0
                                      0.0
0.0
      +0.000 0.0
                    0.0
                          0.0
                                0.0
                                       0.0
                                             S12-S17 12
SHRT
             Focal plane of detector
                 0.
                      -41.3 0.
0.
     0.
           2.
DRIFT
             Plot rest of rays after SHROT
0.0
SENTINEL
                              NR>JNR NRXS = 12
1.0
      1.0
            0.15
                   10.0
                          0.15
                                10.0
                                       0.0
      40.0
            0.15
                   10.0
                          0.15
                                 10.0
                                        00.00
                                              0.000
END DATA
Description:
```

```
5002 → [(Number of projectiles) - 2]
```

235. → Projectile Energy Lab [MeV]

.0001 → Thicknesses of target [µ/cm²]

6. 29. 12.  $\rightarrow$  Z target, A projectile, A Target (respectively)

```
2. 4. 28. 350. 7. Ti 13. 25. → Gas pressure

Foil material

Foil thickness [μ/cm²]

Kind of gas: N₂
```

Charge exchange model: 0.=Dmitriev; 1.=Betz; 2.=Rehm; 3.=Ninov (low vel.); 4.=Schiwietz

0.95 → B field [Tesla]