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momentum calculates the parallel momentum distributions (iopt=1)
of nuclear residues following single nucleon knockout (by the
stripping mechanism: see Bertulani and Hansen in Momentum.pdf).
The data required are shown below - particularly, the wavefunction
of the removed nucleon and the core-target and nucleon-target
S-matrices. The total momentum distribution is written to sigl.tot.
The partial momentum distributions from each m-substate (referred
to z-axis in the beam direction) are written to sigl.0, sigl.1, etc.
The integrated stripping cross section should agree closely with
the value calculated for the stripping term when using knockout.

The bound state and S-matrix files needed are those created
by eikonal_s and bound (bd.xx)


6   17   4   9   80.0
6   16
bd.test
smat.xx
smat.n
1
1
100 100 100 500
 1  1
 1  0
-1 -1


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Input data are as follows
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Zproj   Aproj  Ztarg    Atarg    E/nucleon
Zcore   Acore
file containing the wave function  (bd.xx)
file containing the core-target S-matrix
file containing the valence-target S-matrix
Iopt              (=1 for p//, =3 for p_perp)
Idum       =0     (to use default numbers of points)
                  NR=100, NB=100, NK=100 PMAX=500(MeV/c)
           =1     (to change from default values, e.g. PMAX)
                  Then enter NR, NB, NK, PMAX
L    M1           (L and Lz value pairs)
L    M2
.......
-1   -1       (ends input)


Output is to:
sigl.0
sigl.1
sigl.2
......
sigl.tot
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