

II.C. DETAILS AND CONVENTIONS USED IN SAMMY

Details of cross section evaluation are often a matter of convention: for example, should one use l - s or j - j coupling for spin assignments? The spin conventions used in SAMMY are described in Section II.C.1.

Section II.C.2 describes the conversion of energy and momentum from the laboratory reference system to the center-of-mass system.

The method used for computing $\sin 2\phi$ and $\cos 2\phi$, where ϕ is the hard-sphere phase shift, is described in Section II.C.3.

Modifications are needed to the cross section equations when a channel contains two charged particles. These are described in Section II.C.4.

When data from an inverse reaction are used in an evaluation, modifications to either the measured data or the R-matrix parameters are needed. These are described in Section II.C.5.