

V. POST-PROCESSORS AND OTHER MISCELLANEOUS TOPICS

In addition to fitting energy- and angle-differential data in the resolved (and unresolved) resonance region, SAMMY has capabilities for other tasks such as reproducing cross sections directly from resonance parameters, calculating average cross sections, or creating portions of ENDF files. Some of these features are described in this section. For a discussion of SAMMY's interactions with ENDF files, see Section IX.

Methods for reconstructing point-wise cross sections without having to specify an energy grid are given in Section V.A.

Section V.B includes a discussion SAMMY's calculation of certain integral quantities. The code can also fit to these quantities where data or standard values are available.

Section V.C describes how SAMMY may be used to average cross sections (both theoretical and experimental) over particular energy range. The corresponding covariance matrix is also generated.

SAMMY's calculation of Maxwellian averages of capture cross sections (sometimes called "stellar averages") is discussed in Section V.D.

Section V.E describes various "pseudo cross sections" (simple functional forms) that can be generated by SAMMY, for use primarily in debugging Doppler or resolution functions.

Section V.F describes a method for generating the summed strength function for resonance parameters in a particular spin group.