# *Getting Data from a RAW File*

## *Default Workspace Fields*

When a spectrum is read into a Genie workspace **W** by a command such as:

**W = GET(10)**

the following fields are set up:

- RUN_NO # Run number
- EFIXED # Fixed energy for inelastic experiments
- TWOTHETA # Two theta, averaged over detectors
- USER_NAME # The name of the experimenter
- SPEC_NO # The number of the spectra read in
- DELTA # The average detector "hold off" (micro-seconds)
- EMODE # 0 =elastic, 1=direct, 2=indirect
- UT # Array of user parameters
- X # TOF values (microseconds)
- Y # neutron counts / microsecond
- E # errors in Y
- TITLE # title of the run
- FILE # name of the input file
- L1 # primary flight path (m)
- L2 # secondary flight path (m), averaged over detectors
- RUN_DURATION # run duration (seconds)
- TIME # date experiment performed
- INST_NAME # instrument used

The number of time channels, NTC, is given by **LENGTH(W.Y)** and the number of user tables, NUT, is given by **LENGTH(W.UT)**. There will be NTC+1 values in **W.X**

Note that not all of these fields can be set by a single read as the information is not always present in the RAW file. If the value set is inappropriate, the user can assign it by hand e.g.

**W.EMODE = 1**

**W.EFIXED = 15.6**

## *Obtaining More Information*

The above fields were chosen as they are the ones present in a "Genie II" transform command. There is, however, much more information available in the raw file and this can be read by using the **GET/ITEM** command which has the syntax:

**W = GET:ITEM("LABEL")**

The labels used to name items are the same ones given in CRPT version 2.4[1] and used by the well known GET routines. Examples are:

- NDET # Number of detectors
- NMON # Number of monitors
- SPEC # Detector <-> Spectrum mapping table
- LEN2 # detector length table
- TTHE # detector two theta table

[1] Current Run Parameter Table, Release 2.4, K. J. Knowles, December 1993