Clarification of EXFOR Formats Manual "Covariance data format"
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Below is an extraction for the EXFOR Formats Manual Appendix B "Covariance Format" formulated based on WP2013-35. During revision of the EXFOR Formats Manual, I noticed the order of the data type (e.g., EN) and units (e.g., MEV) is not fixed:

…
Typical cases

1. Energy-energy correlations

For example, we have correlation matrix for a dataset with four experimental data points measured on four incident energies. Matrix 4×4 is symmetric and given in per-cents, energy is given in MeV. This can be coded as:

```
1              (XY,4,EN,MEV)
2               0.597 0.797 0.898 0.906
3              (Z,10,COR,PER-CENT)
4               100
5               46  100
6               40  32  100
7               56  43  37  100
```

Line-1. Code `(XY,4,MEV,EN)` means: two independent variables are equal and given below as array with 4 elements; it is array with energy given in MeV.

Next line has four real numbers present 4 energies.

Line-3. Code `(Z,10,PER-CENT,COR)` means: several following lines will contain array with 10 elements which is correlation matrix given in per-cents. Comparing lengths of X, Y and Z arrays we can see that Z array is given as lower triangular matrix, 10=4*(4+1)/2. If it would be given as squared matrix, array Z would contain 16 elements.

Lines 4 to 7 contains real numbers – correlation coefficients.

Because number of values in one line and format and precision of data are not specified, equivalent presentation can be given differently, for example:

```
1              (XY,4,MEV,EN)
2               0.597 797e-3
3               0.898 0.906
4              (Z,10,PER-CENT,COR)
5               100 46 100 40. 32.0 1e2 56 43 37 1e+02
```

I checked the situation of the EXFOR Master Ver. 2024, and found that an energy unit is coded before EN only in the following four cases:

```
           (XY,67,MEV,EN)                          1317600100048
COVARIANCE (XY,25,EV,EN)                           1468600200034
COVARIANCE (XY,31,MEV,EN)                          4066400200004
           (XY,2,MEV,EN)                           4111200200005
```

I suggest replacement of `(XY,4,MEV,EN)` with `(XY,4,EN,MEV)` in the manual.