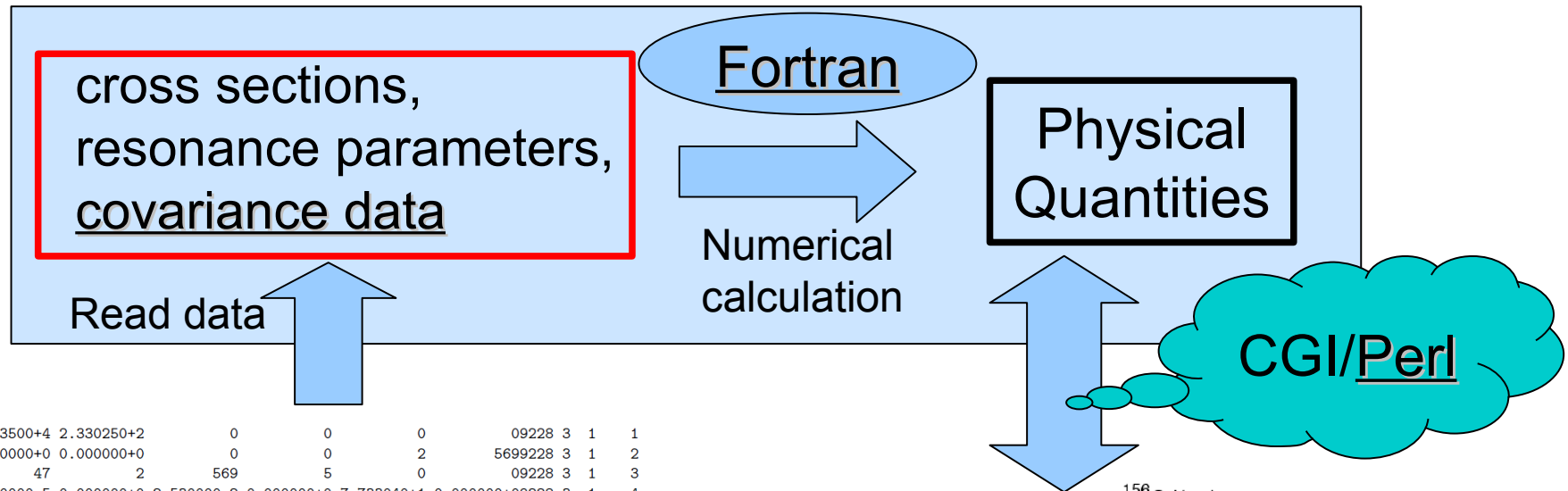


Interface with Evaluated Nuclear Data File

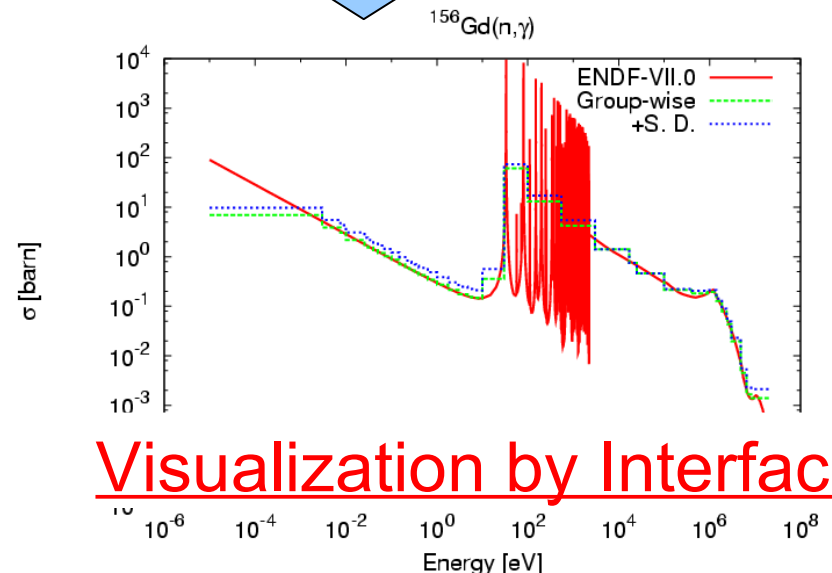
- Evaluated nuclear data have **covariance data** that represent uncertainties derived from measurement and analysis.
- One can estimate errors of physical quantities by using the covariance data in the evaluated nuclear data file (ENDF).
- However, the format of ENDF is too complicated for users without the knowledge of its format to utilize its information directly.
- **This interface visualizes cross sections, variance, and covariance calculated with ENDFs** for support of general users.

Interface with Evaluated Nuclear Data File



```
9.223500+4 2.330250+2 0 0 0 09228 3 1 1
0.000000+0 0.000000+0 0 0 2 5699228 3 1 2
47 2 569 5 0 09228 3 1 3
1.000000-5 0.000000+0 2.530000-2 0.000000+0 7.733040+1 0.000000+09228 3 1 4
7.969630+1 1.504840-9 8.206220+1 2.965660-9 8.679400+1 5.765010-99228 3 1 5
9.625770+1 1.093290-8 1.057210+2 1.561550-8 1.151850+2 1.989670-89228 3 1 6
1.341120+2 2.749360-8 1.530390+2 3.408590-8 1.908930+2 4.512260-89228 3 1 7
2.287480+2 5.415620-8 3.044570+2 6.843310-8 3.801650+2 7.952240-89228 3 1 8
5.315830+2 9.626330-8 6.830000+2 1.087790-7 9.858350+2 1.271050-79228 3 1 9
1.288670+3 1.404810-7 1.894340+3 1.597190-7 2.500000+3 1.735720-79228 3 1 10
2.750000+3 2.292790-7 3.000000+3 2.801360-7 3.500000+3 3.702350-79228 3 1 11
3.750000+3 7.239990-7 4.000000+3 1.054920-6 4.500000+3 1.658860-69228 3 1 12
5.000000+3 2.406700-6 5.500000+3 3.083210-6 6.000000+3 4.483640-69228 3 1 13
6.500000+3 5.771920-6 7.500000+3 8.104080-6 8.500000+3 1.215970-59228 3 1 14
```

Evaluated Nuclear Data
File (**ENDF**)



Visualization by Interface



Present stage of the interface

This interface can display

- cross sections and standard deviations (variance).
- group-wise (44-groups) cross sections and standard deviations.
- group-wise covariance.



Future plans

We will make this interface available for

- other group structures (70, 238 groups, and so on...).
- correlation matrix normalized from covariance.
- comparison with other covariance data except ENDFs.