

## **M6.1 – Code validation**

Milestone **M6.1** – *Code validation* was achieved with a delay. The delay was partly due to the fact that it was planned to validate the codes with residue data AND also with neutron and charged-particle data. All these validations were done within the WP11, and WP4 and WP5 as well. The time needed to find the data (file) and the way to work together took a while. Several changes of the operating system introduced the delay.

The code FLUKA was examined by the contractor **UW** in comparison with the experimental spallation data obtained by NESSI collaboration. The measured neutron multiplicity distribution per event shows a strong disagreement comparing the FLUKA prediction. It was observed that the average number of neutrons emitted in a single spallation reaction fit to the data, but the shapes of the experimental and simulated distributions are different. This result is also important for FLUKA calculations performed for task 5.

Many groups involved in the EURISOL DS project use the FLUKA code. It seems that further study on the observed differences should be performed, hoping to achieve an improvement in FLUKA code.