



Contribution ID: 6

Type: **not specified**

## Calculation of self-shielding correction for Neutron activation experiments at IREN facility using PHITS and MCNP6

*Wednesday 11 June 2025 11:00 (10 minutes)*

Neutron self-shielding corrections are typically determined for activation samples exposed to an isotropic neutron source. However, at the IREN facility, activation samples are placed close to the Neutron Converter surface, where the neutron flux is anisotropic. This study aims to calculate neutron self-shielding corrections for various foil specimens based on the actual experimental setup. Monte Carlo simulations were performed using PHITS and MCNP6, the results were compared to assess consistency.

### Summary

**Presenter:** PHAM, Thanh

**Session Classification:** Section Talks

**Track Classification:** Sectional talks: DLNP