Contribution ID: 13 Type: Talk

EURADOS task on improving the description of nuclear reactions between nucleons and light nuclei, notably 12C, 14N and 16O

Monday 7 July 2025 16:15 (15 minutes)

The European Radiation Dosimetry Group (EURADOS) has identified a weakness in nuclear models describing the interactions between nucleons with energies from 20 to 200 MeV and light nuclei, mainly carbon, nitrogen and oxygen. This type of interaction is fundamental to a proper description of radiation transport for nucleons in the environment and in the human body.

This contribution will present the actions underway within EURADOS, the nuclear data community with the JEFF meeting and within the High Priority Request List (HPRL) of the Nuclear Energy Agency (NEA).

Author: PETIT, Michaël (ASNR)

Co-authors: Dr EAKINS, Jonathan (United Kingdom Health Security Agency (UKHSA)); Dr STOLARCZYK,

Liliana (Danish Centre for Particle Therapy); CARESANA, Marco (Politecnico di Milano)

Presenter: PETIT, Michaël (ASNR)

Session Classification: Nuclear Data

Track Classification: Day 1: Health and Radiation Protection; Science and Technology: Nuclear

data