

SEMINARIUM FIZYKI JĄDRA ATOMOWEGO

Dnia **30.04.2020 r.** (czwartek) o godzinie **10:15** odbędzie się seminarium on-line, na którym wygłoszony zostanie referat:

„Radiative neutron capture cross section measurement of germanium isotopes at the n_TOF CERN facility and its relevance for stellar nucleosynthesis”

link do seminarium: <https://meet.google.com/afb-cwio-wum>

Abstract: Stellar nucleosynthesis is the name given to the nuclear reactions taking place in stars to create the nuclei of the heavier elements. The radiative neutron capture reactions (n, γ) in stars are responsible for forming about 99% of the elemental abundances heavier than Fe. The neutron capture cross section on Ge affects the abundances produced in this process for a number of heavier isotopes up to a mass number of $A = 90$. Additionally, neutron capture on Ge is of interest for low background experiments involving Ge detectors.

Measurements were performed at the n TOF facility via the time-of-flight technique, enabling neutron spectrometry. Excellent time resolution allows to determine the neutron resonance parameters up to hundreds of keV and averaged cross section calculated for neutron energies at stars helps to predict the s-abundances in the solar system.

referuje: **dr Aleksandra Gawlik (Uniwersytet Łódzki)**

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