



 **Emmanuel REY-HERME**

From France to Finland 

Project: **Neutron-deficient actinides**

Research topic: **Physics**

Finnish Institution: **University of Jyväskylä**

French Institution: **Université Paris Saclay**

Dates of mobility: **21/10/2022 to 04/11/2021**

Program: **Maupertuis Programme (SMR)**

PRESENTATION

[Emmanuel Rey-Herme](#) studied a first year master in fundamental physics and a second year specialised in nuclear and particle physics (NPAC master, Paris-Saclay University). His Ph.D. in Nuclear Physics focuses on «Search for pear-shaped nuclei in actinides: study of a new reaction mechanism for the production of neutron-deficient actinides and development of a detector dedicated to the laser spectroscopy of actinides» and was supervised by [M. Vandebrouck](#). He also has a working experience on the simulations of a future detector designed for the study of such nuclei (the SEASON detector).

ACTIVITIES IN FINLAND

The mobility was an opportunity to strengthen the relationship between the team of the [Accelerator Laboratory](#) of the [University of Jyväskylä](#) and the team at [CEA-Saclay](#). During his stay, Emmanuel Rey-Herme and his counterparts prepared and ran an experiment to study the production of those neutron-deficient actinides with novel uranium drop-on-demand targets produced by a team from the [University of Mainz](#). In addition, they were able to discuss future experiments at Jyväskylä with a detector currently under development at CEA-Saclay: the SEASON (Spectroscopy Electron Alpha in Silicon bOx couNter) detector. It was a great opportunity to discover the experimental setup and the IGISOL (Ion Guide Isotope Separation On-line) facility.