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## The $^{243}\text{Am}(n,f)$ cross-section campaign at the n\_TOF facility at CERN

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The  $^{243}\text{Am}(n,f)$  reaction is very important both for basic Nuclear Physics and Nuclear Technology. However, the available data in literature for the  $^{243}\text{Am}(n,f)$  reaction are scarce, especially in the sub-threshold region presenting many discrepancies and/or poor energy resolution. To this end, a challenging measurement of this cross section was organized and performed at the n\_TOF facility at CERN in order to produce, for the first time, a high-accuracy and high-resolution dataset of the  $^{243}\text{Am}(n,f)$  reaction, covering the neutron energy range of 10 orders of magnitude from thermal up to hundreds of MeV.

This challenging measurement lasted ~3 months and needed a very long preparatory phase with long and frequent stays at CERN and has been strongly supported by ARIEL. The involved PhD, PostDoc and Staff members have benefited a) through the mobility support for education and training visits for Early-Stage Researchers and b) through Transnational Access for beam time at the CERN n\_TOF facility. An overview of this campaign will be given in this presentation.

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