ID de Contribution: **23** Type: **Non spécifié**

Search for ns to µs isomers in 73Zn

mardi 13 mai 2025 15:00 (20 minutes)

(for the collaboration around experiment e680)
The spectroscopy of the neutron rich N=41-49 Zn isotopes was performed using AGATA coupled to VAMOS++ at GANIL. The isotopes were produced using the 238U(@6.2 MeV/u) + 9Be fusion-fission reaction. The gamma rays were detected in AGATA and the light fission fragments were selected in VAMOS++. As Zn is the lower Z chemical element for which gamma-ray spectra could be constructed,the statistics is scarce. The isotopes from mass 73 to 79 could be identified and studied. A detailed analysis of the systematics in this region of the Segree map enables us to conclude that two isomeric states, not yet observed, exist in 73Zn and lie low above the known 5/2+ isomeric state (E*=196 keV, T1/2 = 13 ms). The experimental results will be presented as well as the related discussion about these two isomers. A discussion will be opened about their identification and the measurement of their nuclear moment.

Author: DUCHENE, Gilbert (IPHC - CNRS - UNISTRA)

Orateur: DUCHENE, Gilbert (IPHC - CNRS - UNISTRA)

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