



ID de Contribution: 24

Type: **Invited presentation**

Missing mass spectroscopy of light proton unbound nuclei

lundi 25 septembre 2023 11:40 (25 minutes)

Light proton-unbound nuclei, ${}^8\text{C}$, ${}^7\text{B}$, ${}^6\text{Be}$ and ${}^5\text{Li}$, were investigated by the missing mass method. By using this method, we can measure resonances independently of their decay channels. This is efficient especially for the four-proton unbound nucleus ${}^8\text{C}$. Decay channels can be also investigated by the coincidence detection. We performed the experiment with an $N=3$ isotone secondary beam containing ${}^9\text{C}$, ${}^8\text{B}$, ${}^7\text{Be}$ and ${}^6\text{Li}$ produced by the LISE spectrometer. The beam was bombarded on a liquid hydrogen target of 1.5 mm in thickness. Resonances in proton-unbound $N=2$ isotones were systematically populated via the one-neutron transfer (p, d) reaction. An array of MUST2 telescopes was used to detect recoil deuterons from the target and decay fragments. We will report on the experimental results on newly observed resonances.

Auteur principal: KOYAMA, Shumpei (GANIL)

Orateur: KOYAMA, Shumpei (GANIL)

Classification de Session: Nuclei at the drip lines

Classification de thématique: Nuclear Structure