



Contribution ID: 217

Type: **Oral contribution**

## The search for the tetra neutron

*Monday 27 June 2022 12:00 (20 minutes)*

Whether multi-neutron systems can exist as weakly bound states or very short-lived unbound resonant states has been a long standing quest. The experimental search for such systems has been going for six decades, with a particular focus on the four-neutron system, the tetra neutron, resulting in up to date only few indications for its existence.

In this talk I will present a recent experiment performed at the RIKEN Nishina Center in Japan. The measurement was conducted at the SAMURAI setup using the quasi-elastic knockout of an alpha particle from a high-energy  $^8\text{He}$  projectile induced by a proton target to populate a possible tetra neutron state.

### Topic

Experiment

**Author:** DUER, Meytal

**Presenter:** DUER, Meytal

**Session Classification:** MON2