

## Overview of the experiment RIBF30 ; In-beam gamma-ray spectroscopy for vicinity of $^{78}\text{Ni}$

*Monday, 15 September 2014 11:15 (20 minutes)*

This experiment was performed at RIBF in 2011.

The physical goal of this experiment is understanding nuclear structure and nuclear force in the region of around  $^{78}\text{Ni}$ .

Excited energy levels of nuclei around  $^{78}\text{Ni}$  was studied by knock-out reaction impinging RI-beam on Be target(1889 mg/cm<sup>2</sup>).

The gamma-ray was measured by DALI2 at F8 detector and residual nuclei was identified by ZeroDegree spectrometer.

We obtained a lot of spectra of nuclei of around  $^{78}\text{Ni}$ .

I will discuss the shell structure evolution of the magic number  $Z=28$  and  $N=50$  based on obtained results.

**Primary author:** YOSHIAKI, Shiga (Rikkyo)

**Presenter:** YOSHIAKI, Shiga (Rikkyo)

**Session Classification:** Session 2