

# Group Meeting

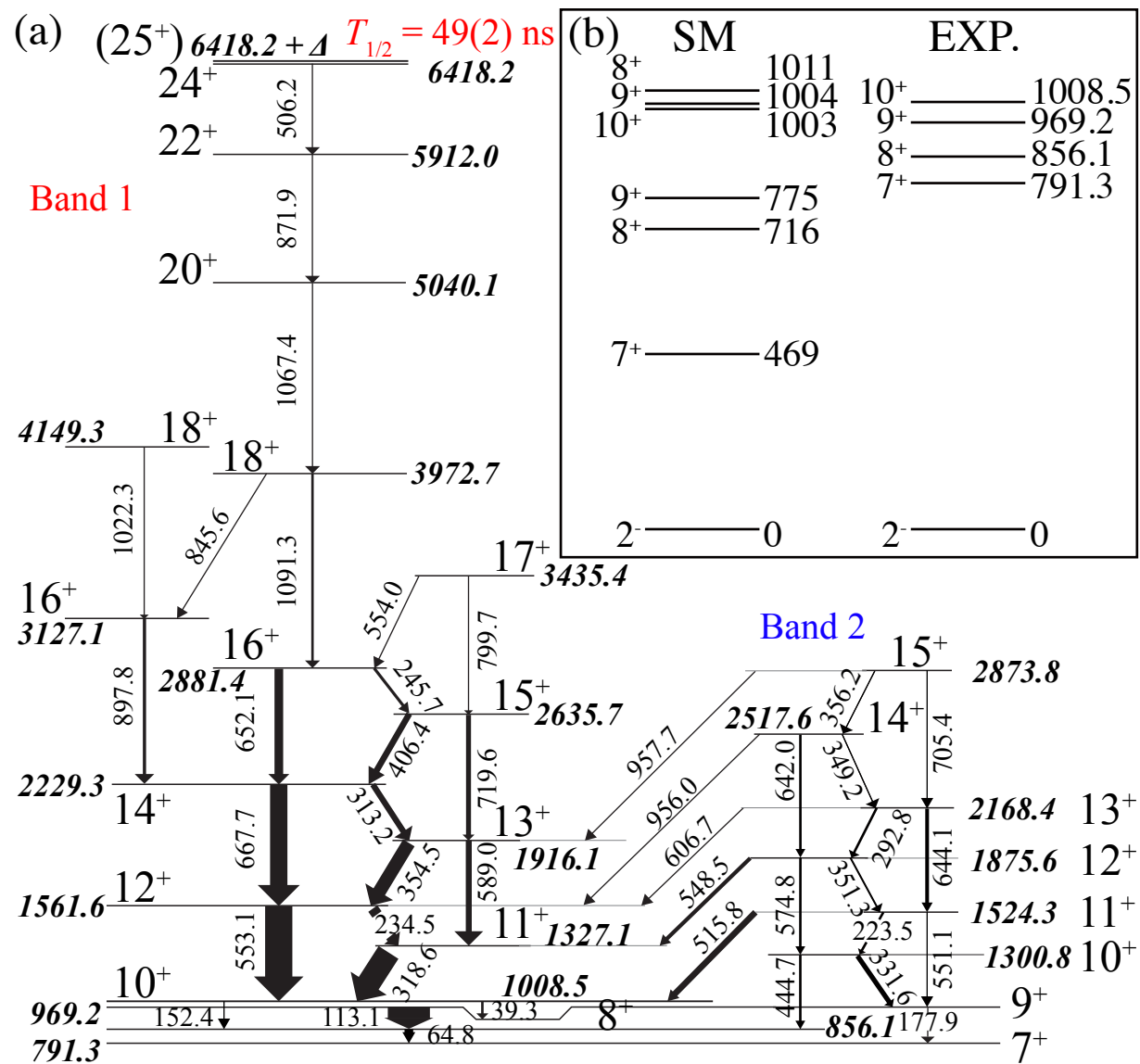
19th. April. 2018

Byul Moon

# Progress

1. Submit a letter to PLB : Occurrence of a chiral-like pair band and a six-nucleon non-collective oblate isomer in  $^{120}\text{I}$ .
2. Further analysis on EURICA data.
3. Submit abstracts for “Nuclear Structure 2018”.

# 120I Results



## Chiral-like pair band

1. First observation of a chiral-like pair band below  $Z = 53$ .
2. The chiral-like pair band built on  $\pi h_{11/2} \nu h_{11/2}$  configuration.
3. Observables provide clear evidences of the chiral-like pair band but theoretical predictions do not satisfy previous conditions.
4. New theoretical description is required.

## Non-collective oblate isomer

1. First observation in iodine.
2. According to total Routhian surface calculations, non-collectivity with oblate shape.
3. TRS and SM calculations provide  $\pi(h_{11/2})^1(g_{7/2})^1(d_{5/2})^1\nu(h_{11/2})^3$ .

# EURICA Analysis

For more delicate results, improved analyses are required such as reducing backgrounds.

Previously adopted calibrations

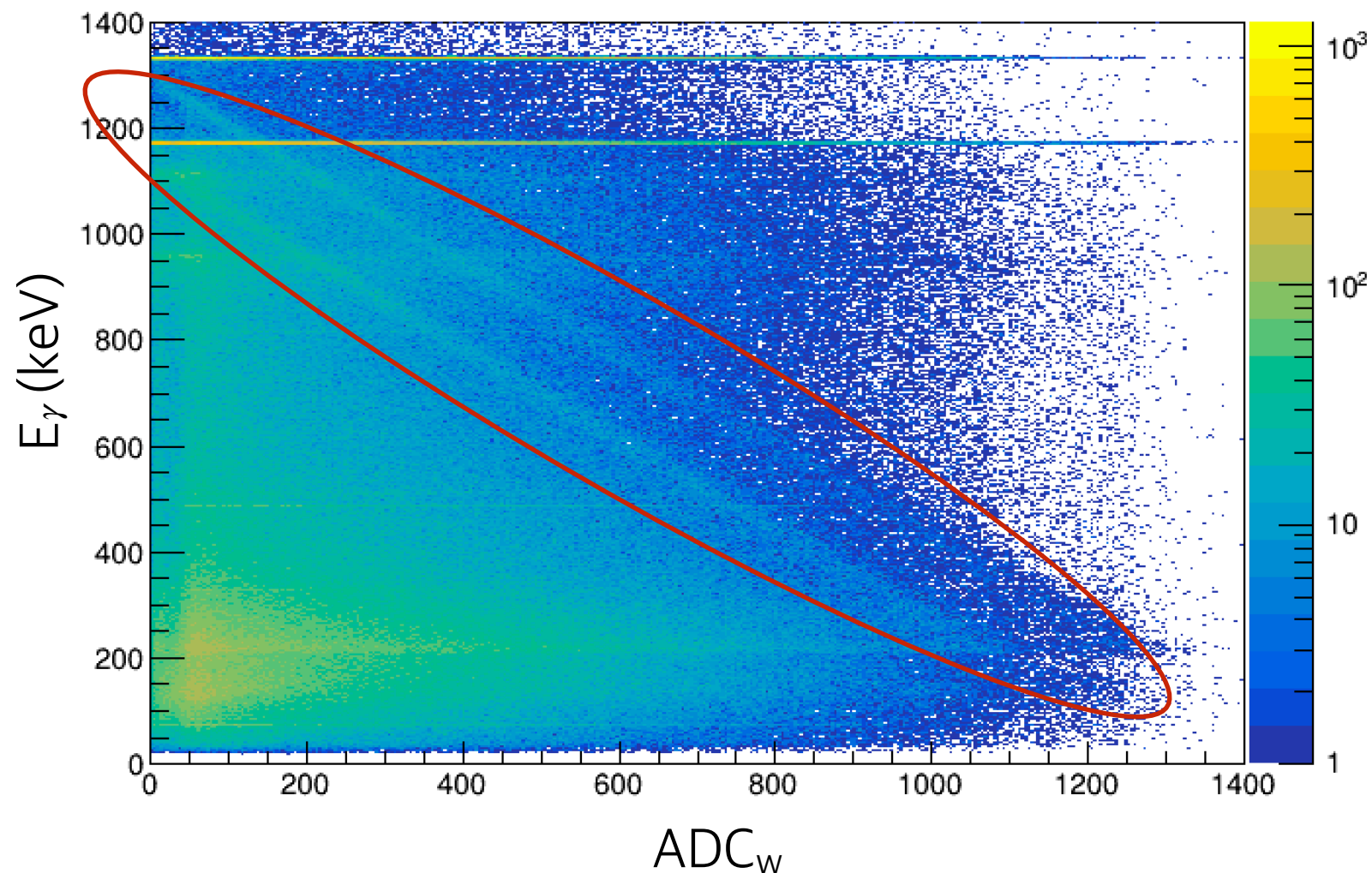
1. Energy calibration of EURICA arrays.
2. Timing calibration of EURICA arrays.
3. Efficiency calibration of EURICA arrays.

On going further calibrations

1. Energy calibration of WASABI.
2. TDC zero point calibration of WASABI.
3. Overflow of EURICA arrays.

# EURICA Analysis

Correlation between WASABI & EURICA using  $^{60}\text{Co}$ . (2nd WASABI layer with all x-strips.)

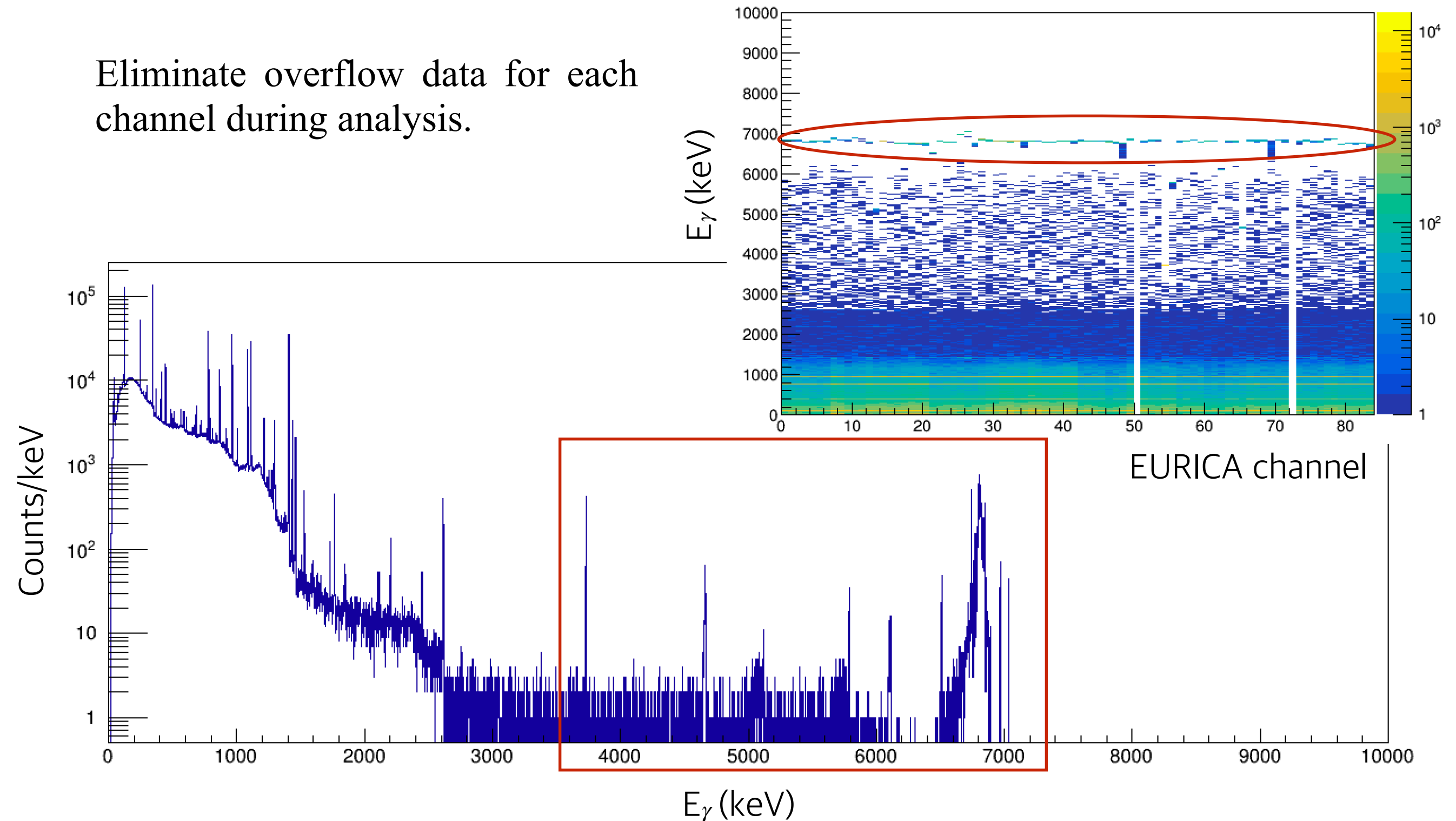


## Problems

1. Insufficient statistics.
2. Gain change during BT.

# EURICA Analysis

Eliminate overflow data for each channel during analysis.



# EURICA Analysis

Future plan for analysis

1. WASABI energy calibration.
2. Adopt WASABI E cut conditions. ( $E_x = E_y$ )
3.  $\beta$ -ray tracking.
4. BigRIPS analysis.

# Back up

