

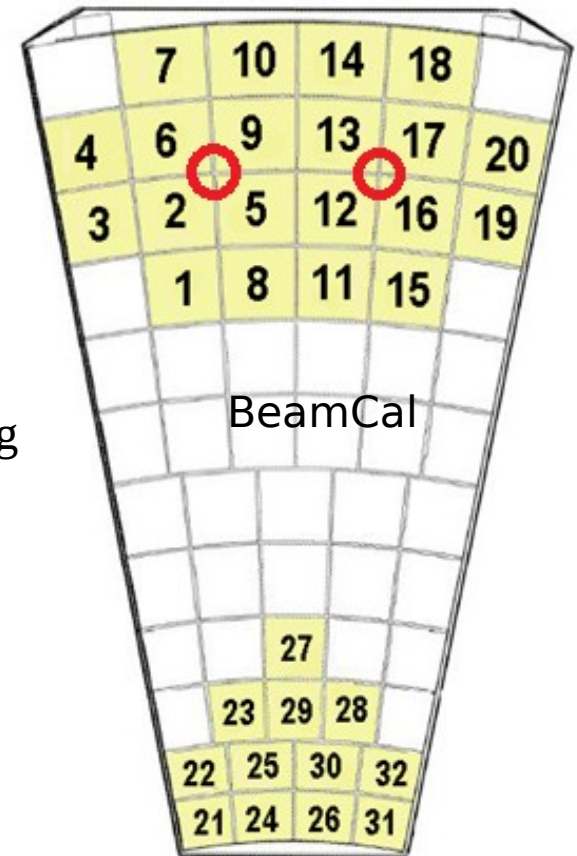
# Preliminary results of the test beam data analysis

**Veta Ghenescu\***

*\*Institute of Space Science, Atomistilor 409, Bucharest-Măgurele RO-077125, ROMÂNIA  
ghenescu@spacescience.ro*

# Edge measurements

Studied the test beam data for pads: 12, 13, 16, 17 using raw files and old root files for run000400 to run000404.

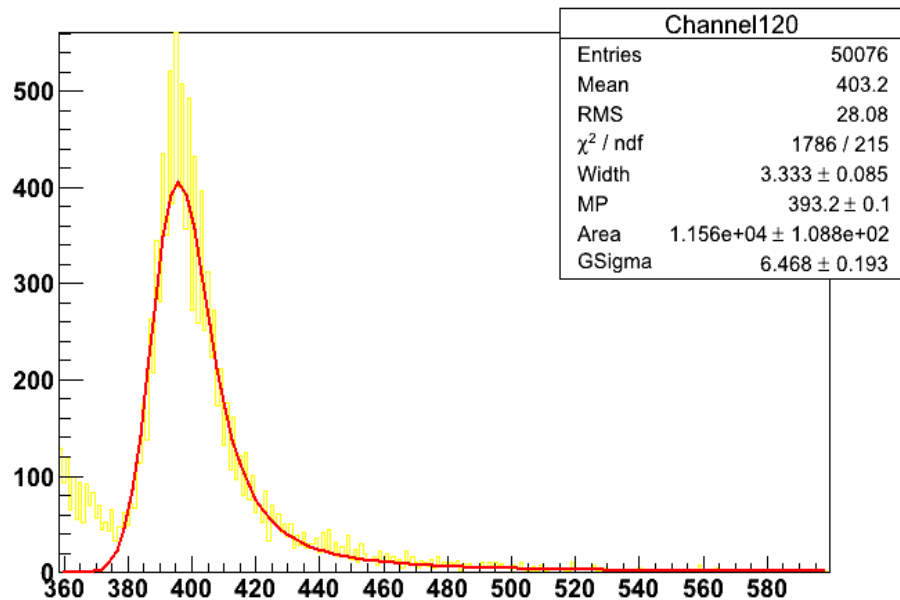


# Edge measurements

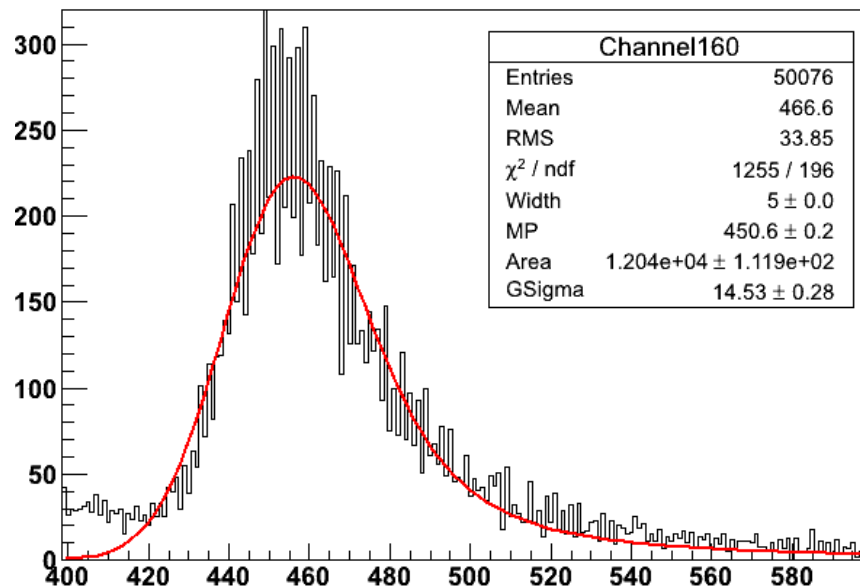
## **Methods used to obtain the new root files:**

1. **M1** – using the mean value of the **P** and **S** between 22 to 30 samples without deconvolution;
2. **M1\_Dec** - using the mean value of the **P** and **S** between 22 to 30 samples with deconvolution;
3. **M2** - using the mean value of the **P** between 2 to 22 samples and for **S** between 22 to 30 samples without deconvolution;
4. **M2\_Dec** - using the mean value of the **P** between 2 to 22 samples and for **S** between 22 to 30 samples with deconvolution;

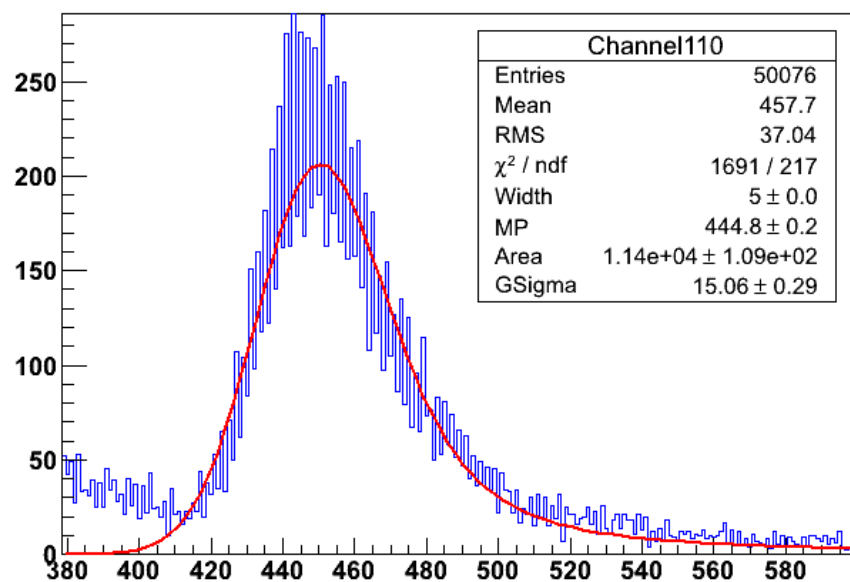
Channel12



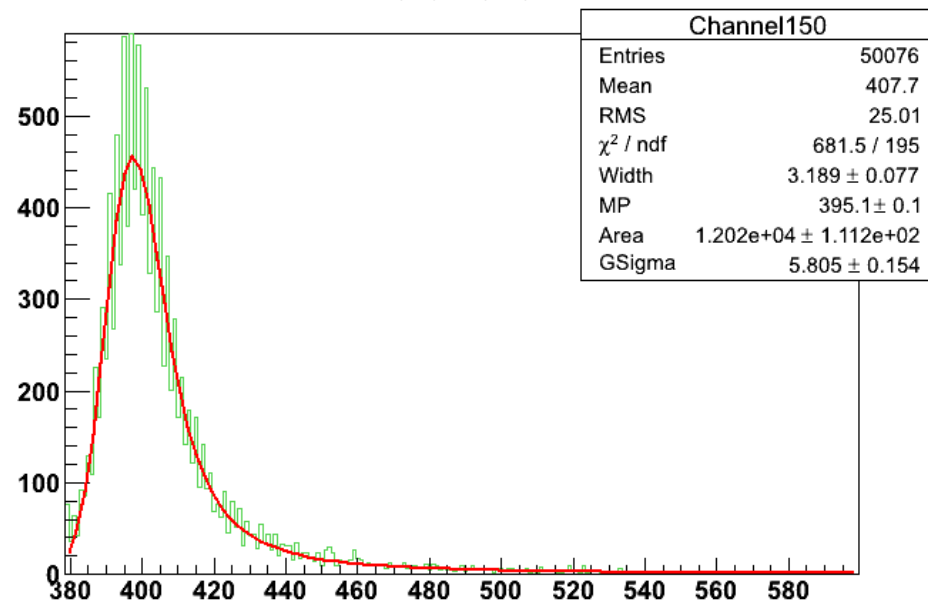
Channel16



Channel11



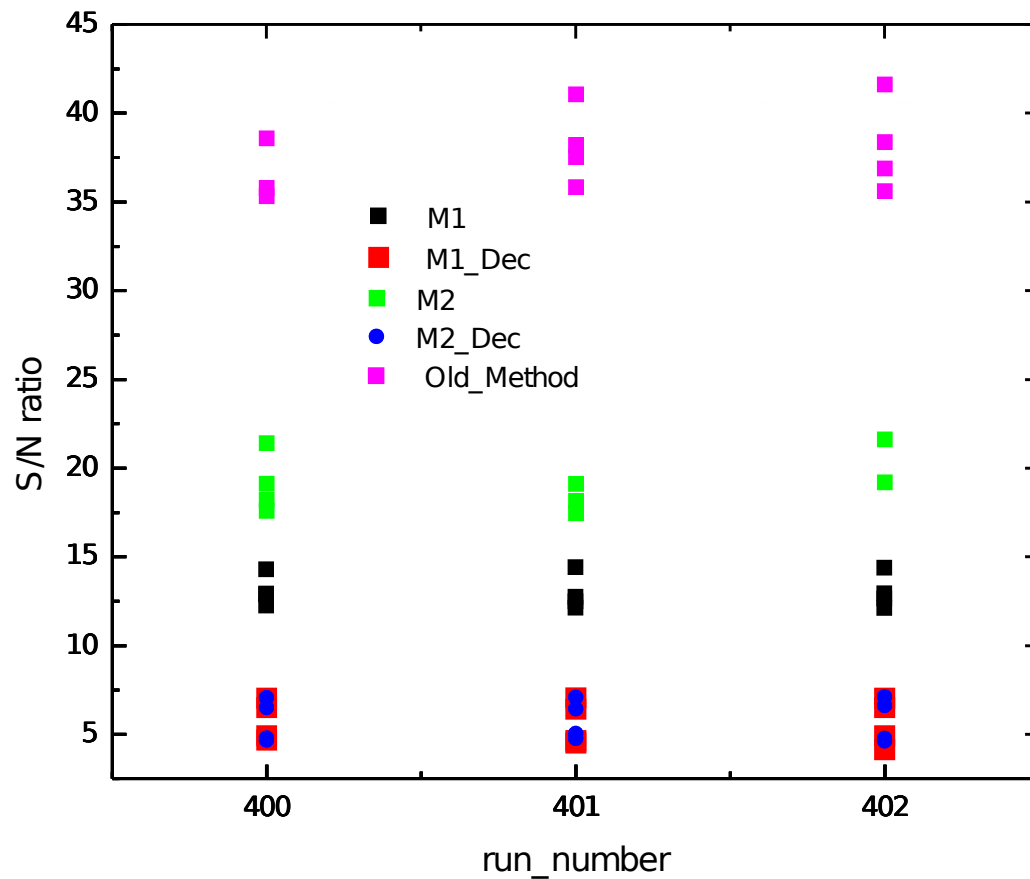
Channel15



# Results

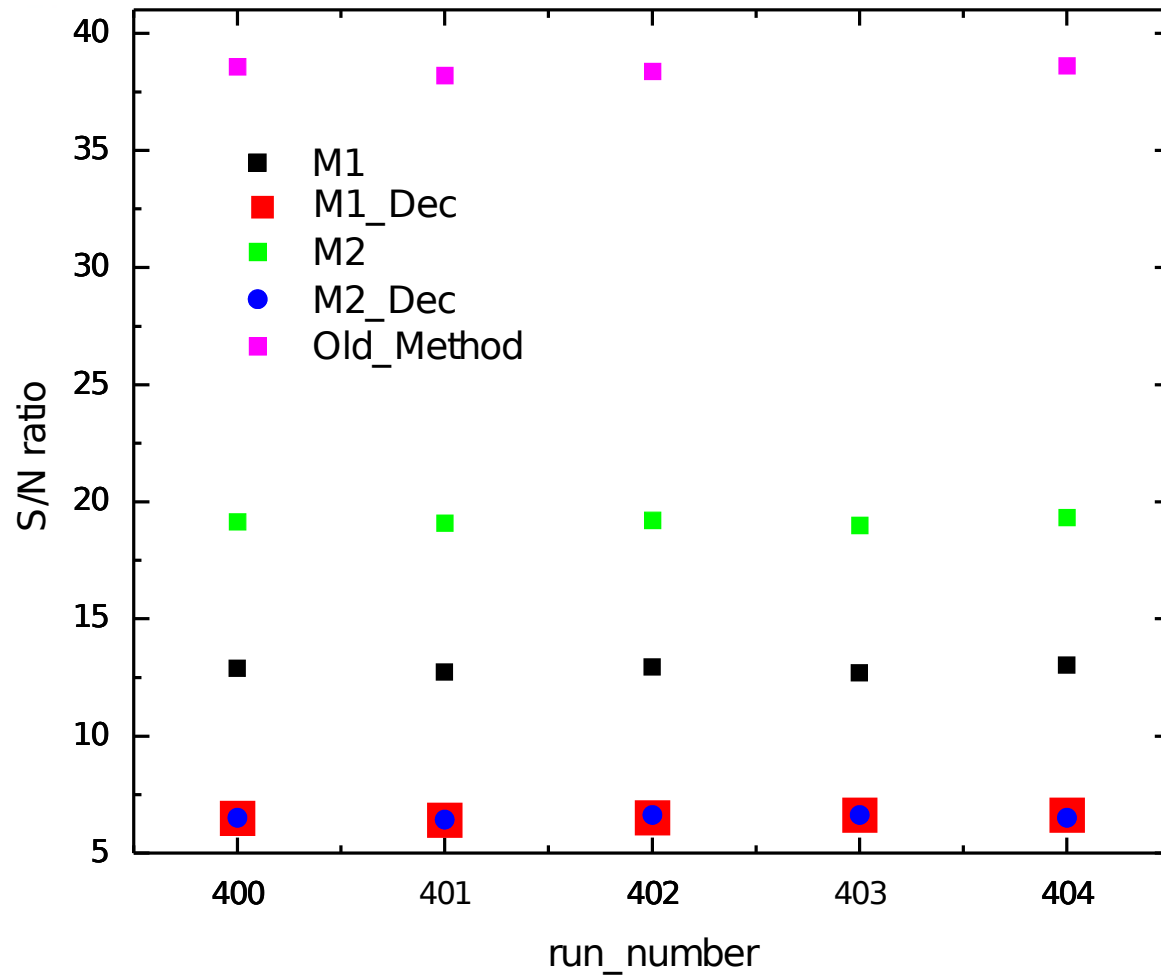
Method	S/N ratio
M1	13
M1_Dec	6
M2	19
M2_Dec	6
Old_Method	38

**S/N ratio on the 4 pads for 3 runs**



$$\frac{S}{N} = \frac{MPV_{Signal} - mean_{Pedestal}}{\sigma_{Pedestal}}$$

## One pad S/N ratio for 5 runs with different methods



- **We estimate the signal to noise ratio for the first order pads;**
- **Preliminary results for S/N ratio with different algorithms were calculated;**
- **Measured data fitted very well to Landau convoluted with Gauss distribution;**