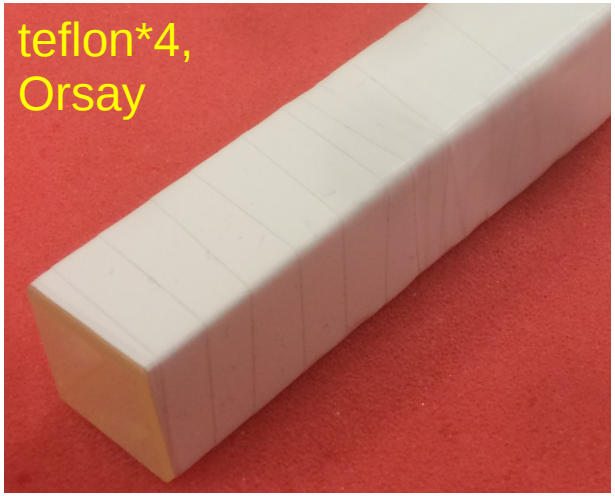
Light yield measurement at IPN-Orsay

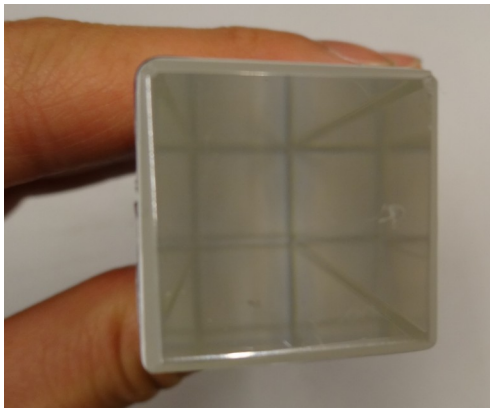
Rong Wang ...
Institut de Physique Nucléaire d'Orsay, France

Wrappings

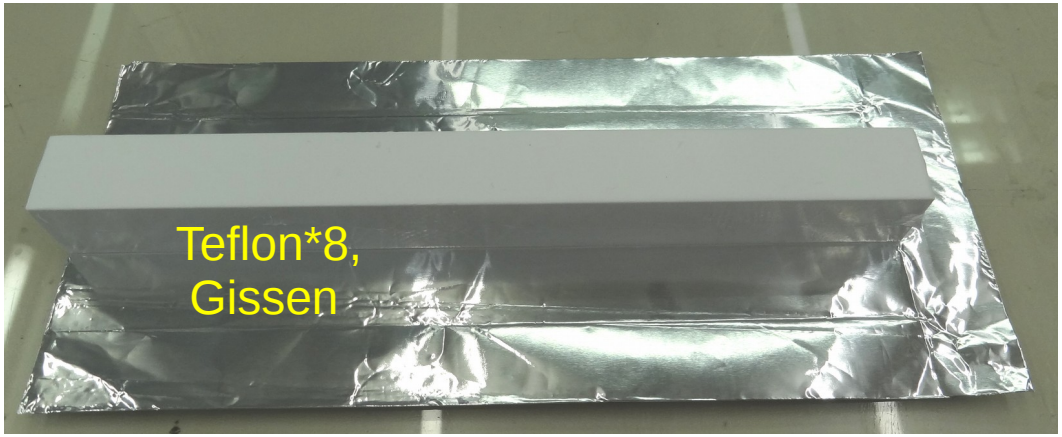

teflon*4,
Orsay

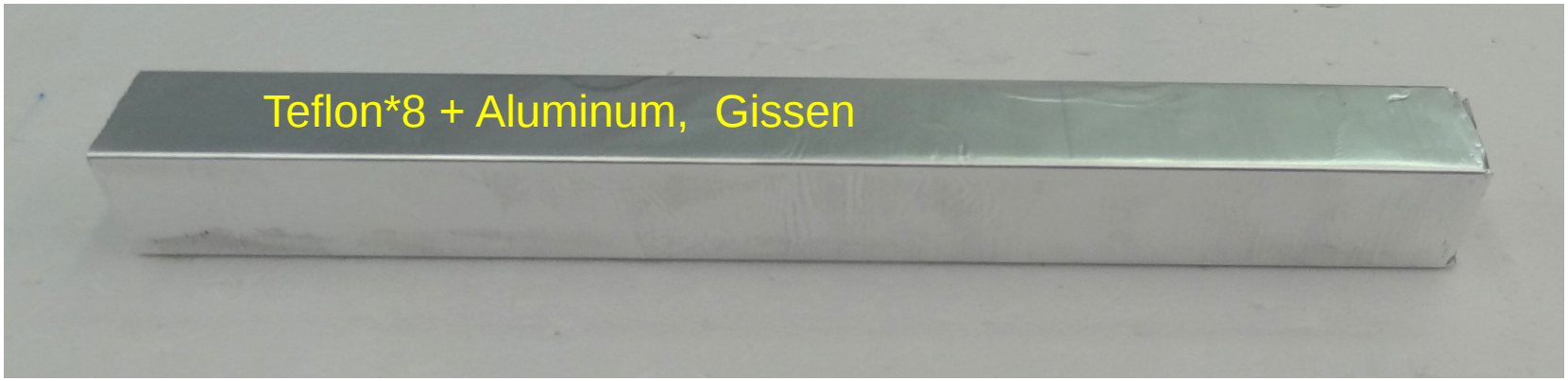

Teflon*4 + Aluminum,
Orsay

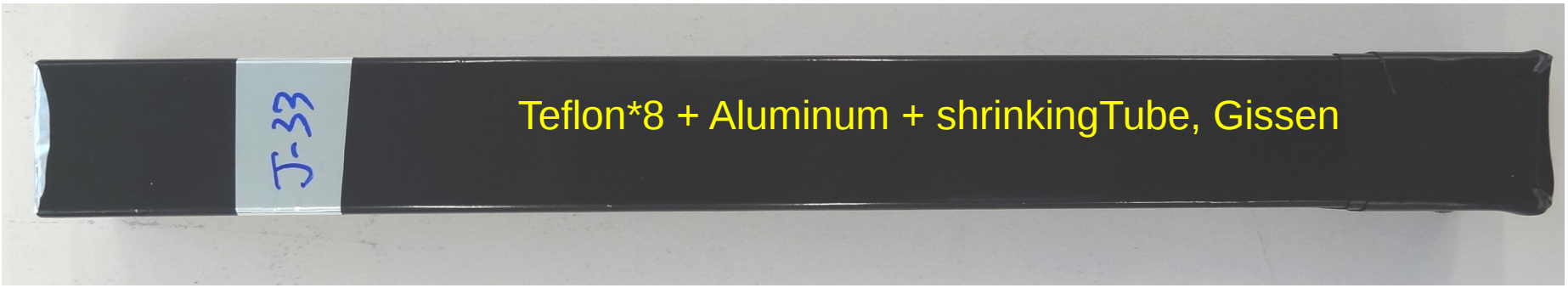

Teflon*4 + Aluminum + shrinking tube,
Orsay



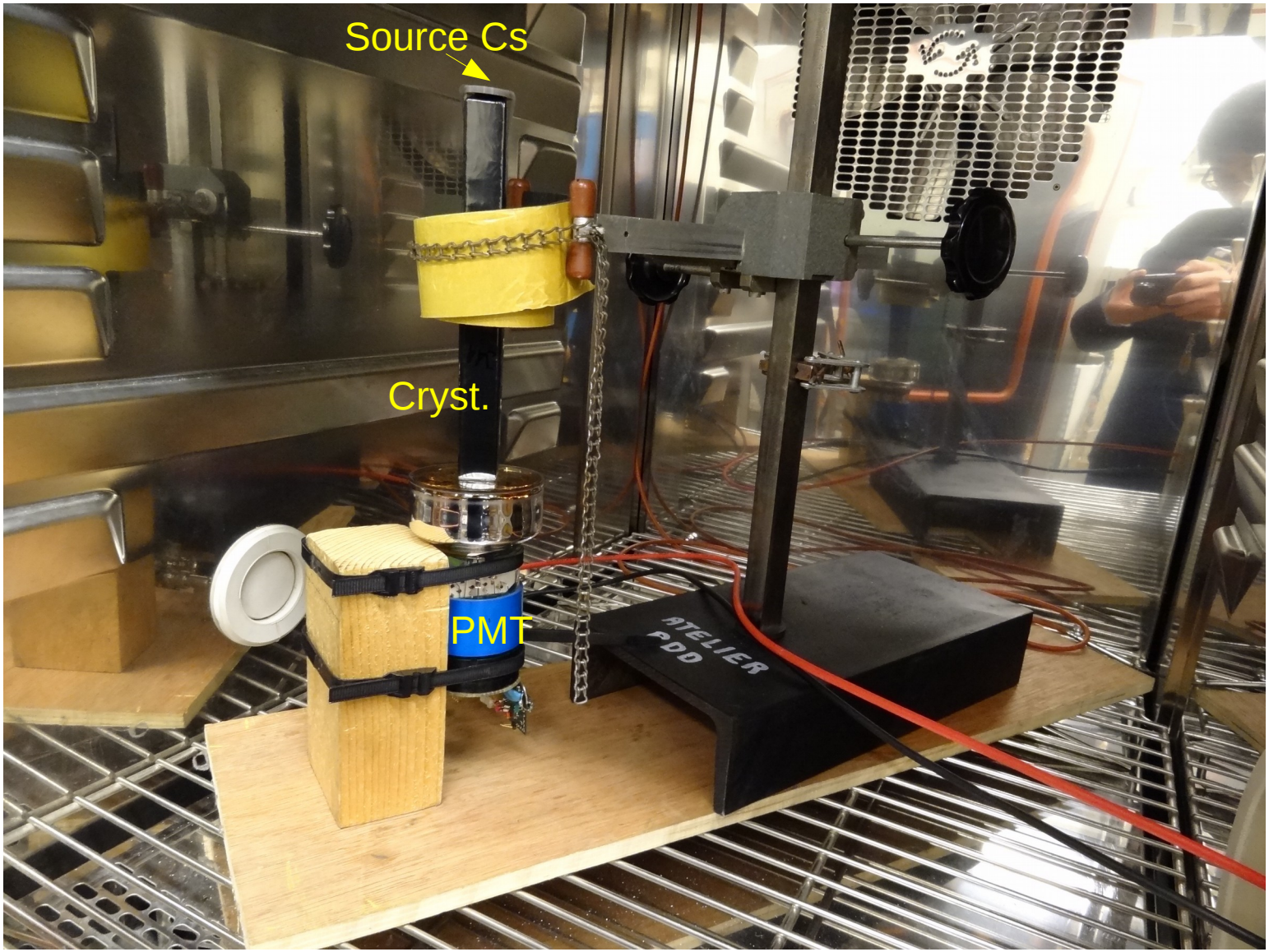
Wrappings


Teflon*8,
Gissen


Teflon*8 + Aluminum, Gissen

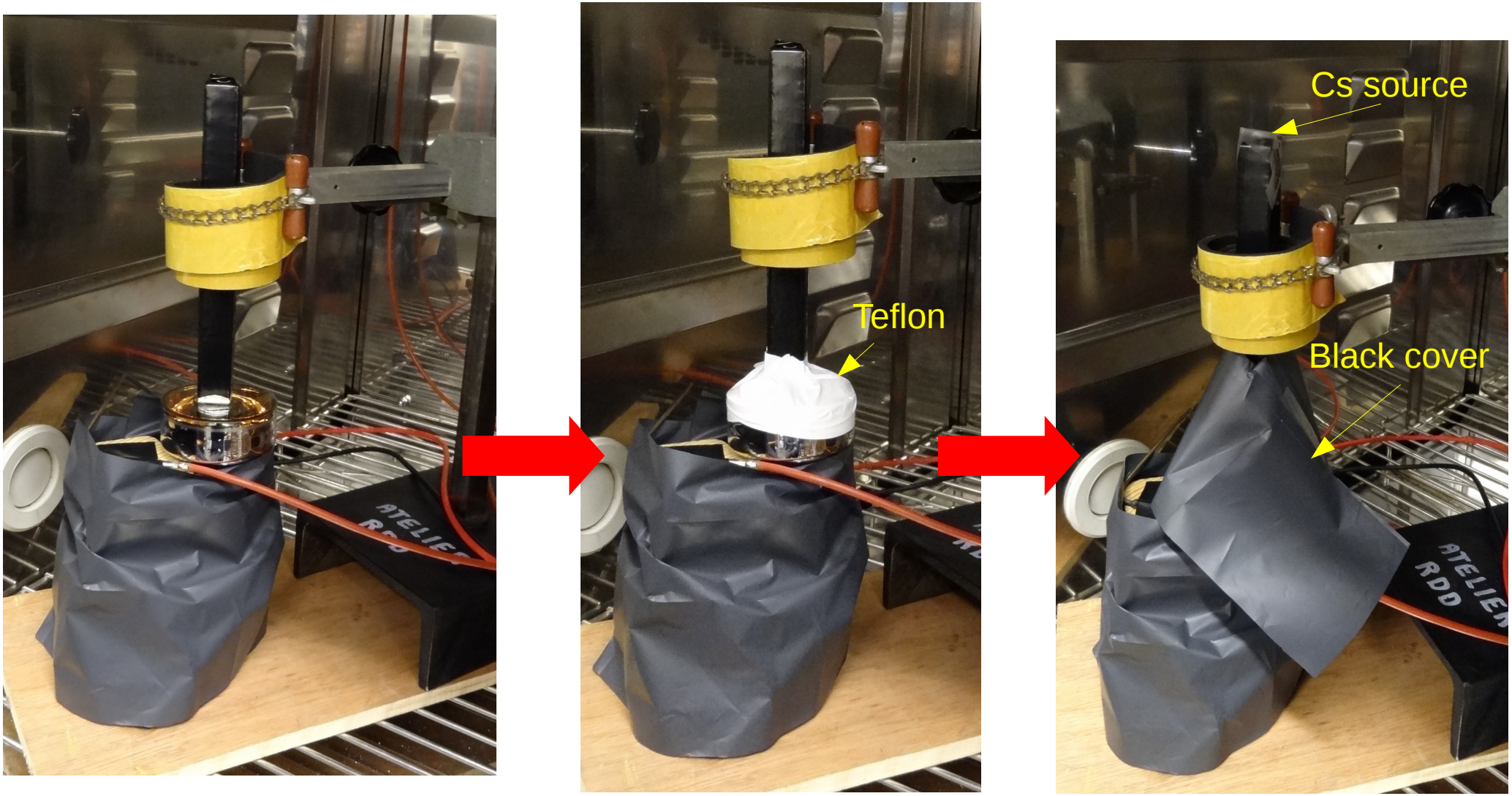

J-33
Teflon*8 + Aluminum + shrinkingTube, Gissen

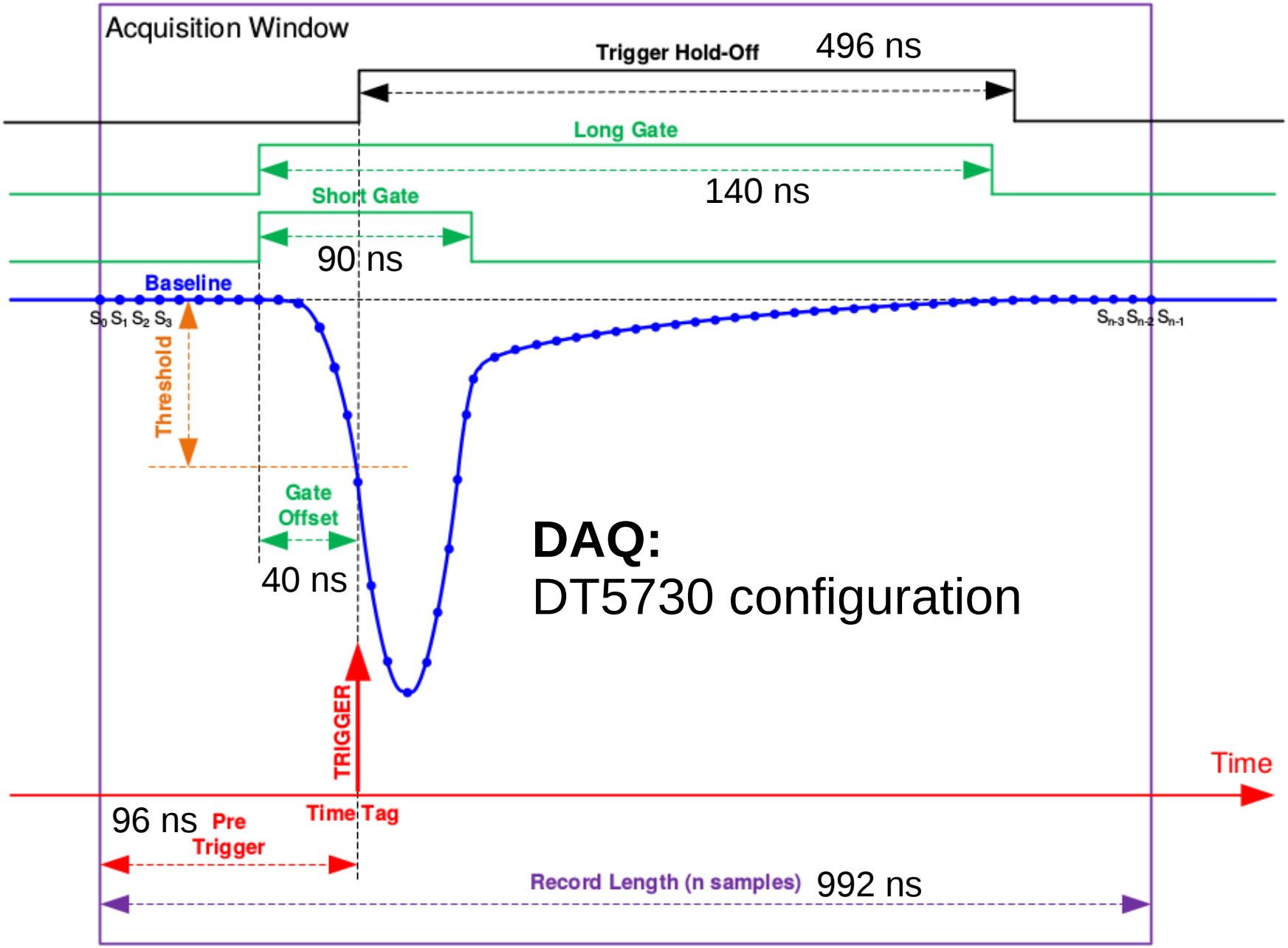
Temperature-controlled chamber



At IPN-Orsay

Temperature-controlled chamber

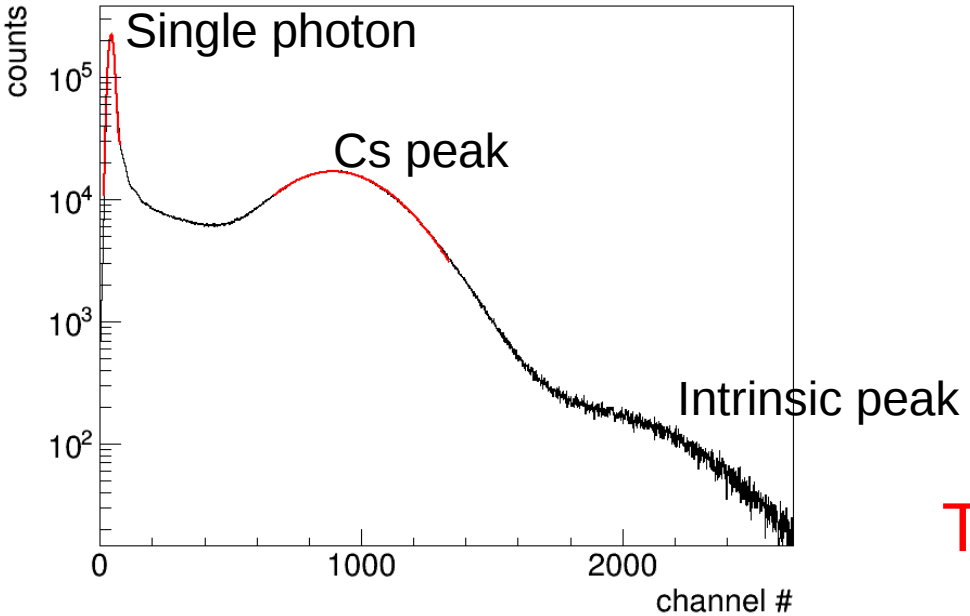




DAQ:
DT5730 configuration

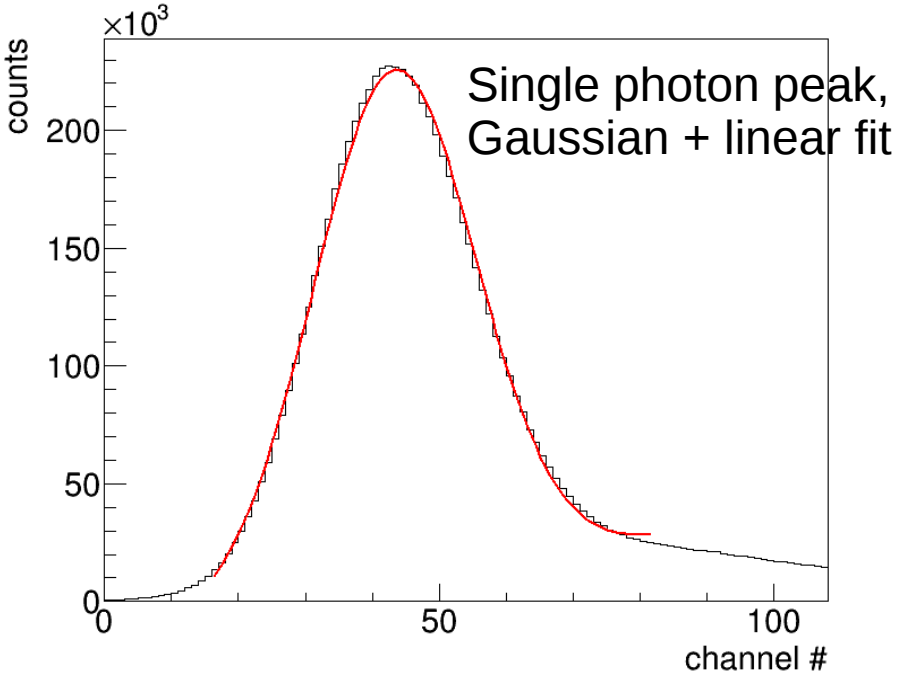
Threshold: 20 lsb; CFD fraction: 75%

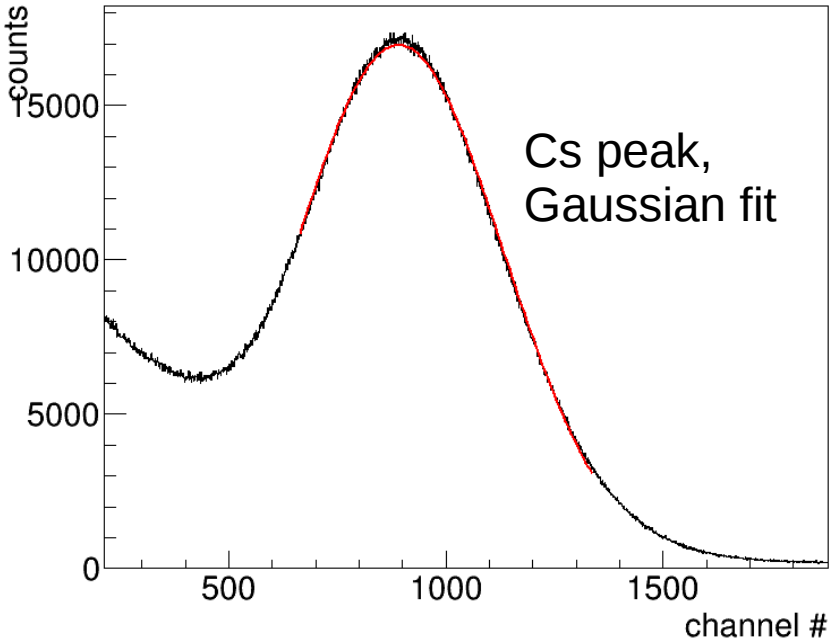
Spectrum with 137Cs source for J43



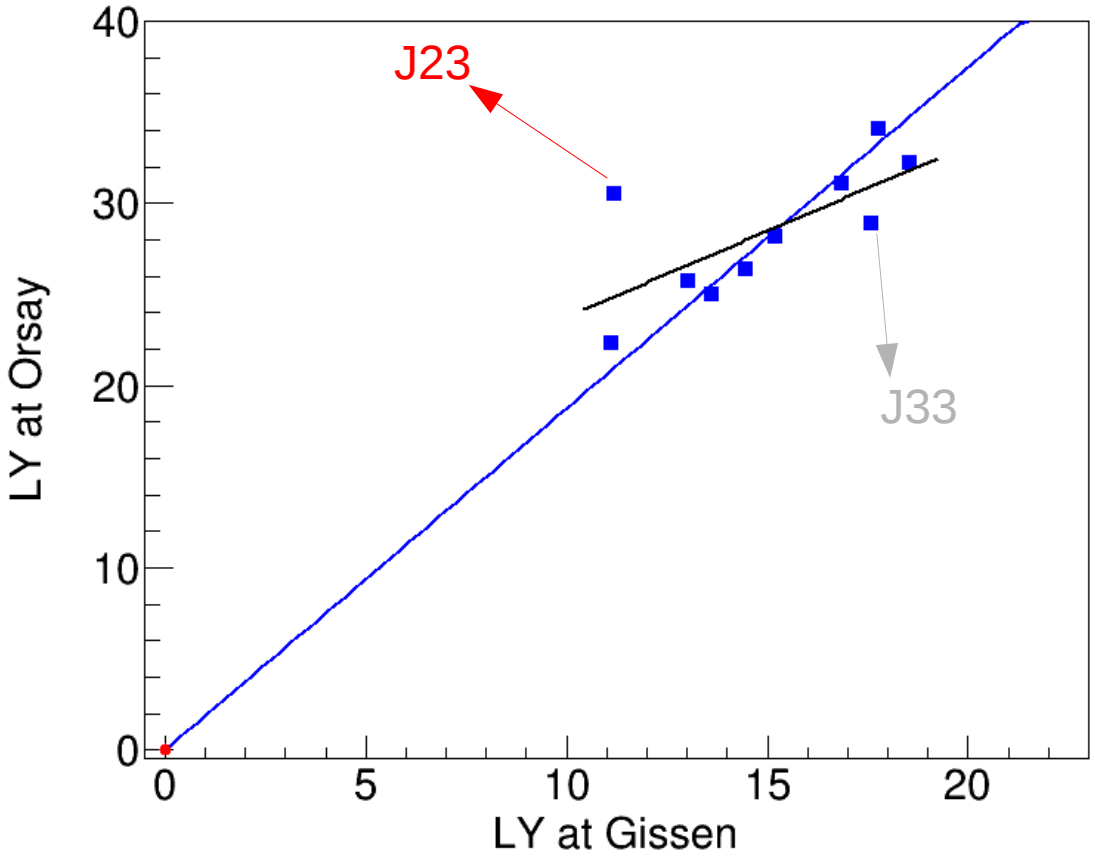
Number of photo-electrons
= Mean_singlePhoton
/ Mean_Cs

Temperature at 18 Deg!



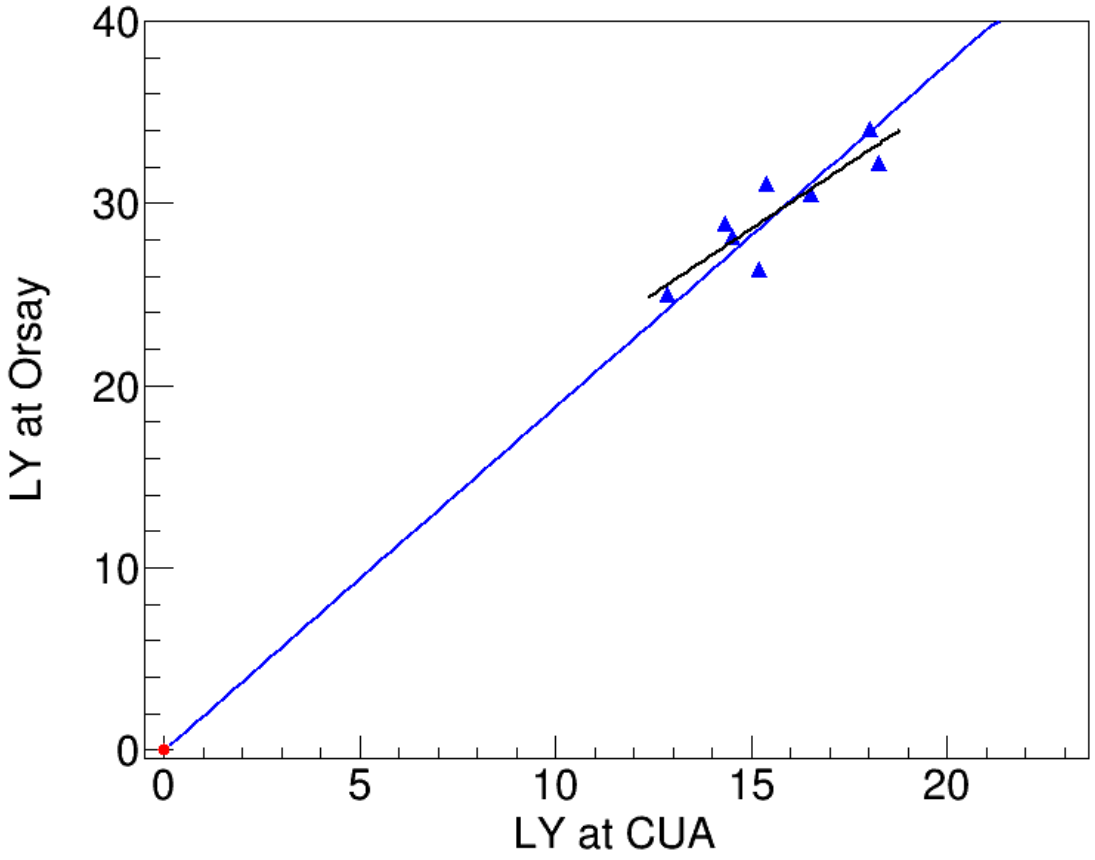


Correlation between IPN and Gissen



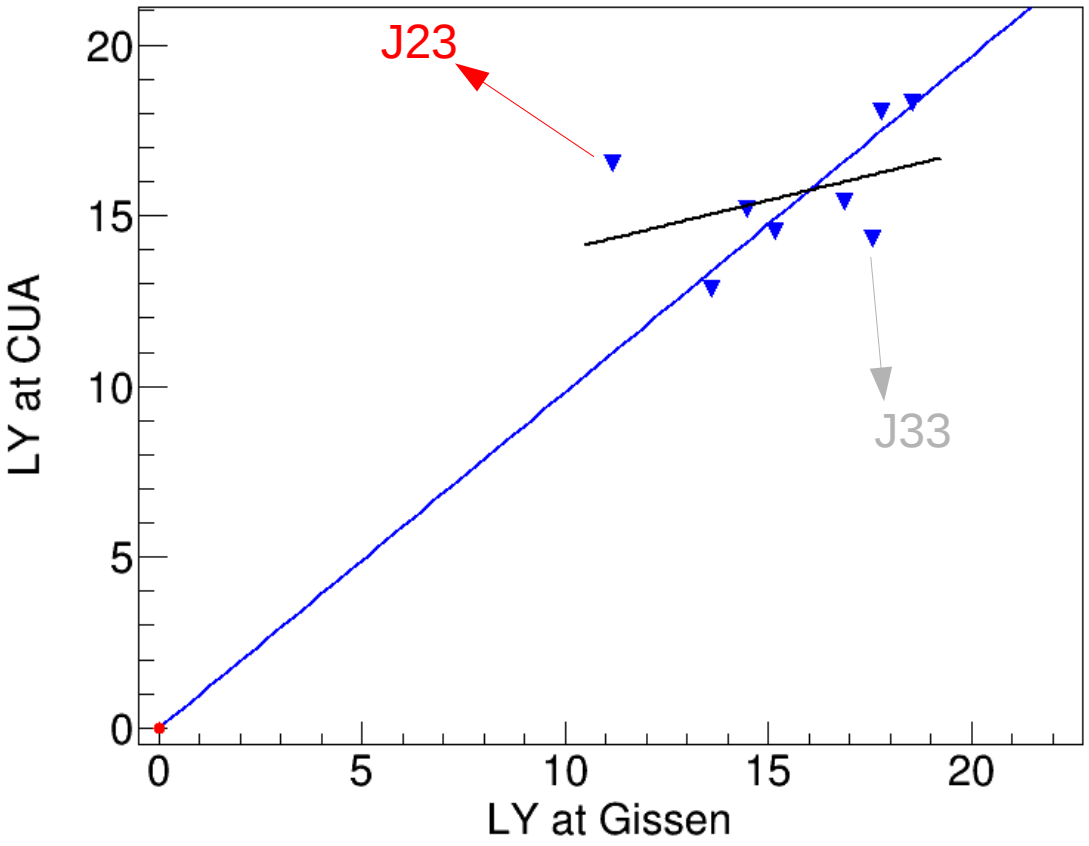
LY_Orsay = 1.87 * LY_Gissen

Correlation between IPN and CUA



LY_Orsay = 1.88 * LY_CUA

Correlation between CUA and Gissen



LY_CUA = 0.983 * LY_Gissen

Summary

- LY at IPN is linearly correlated with LY at CUA
- Excluding the data point of J33, all the measurements are correlated.