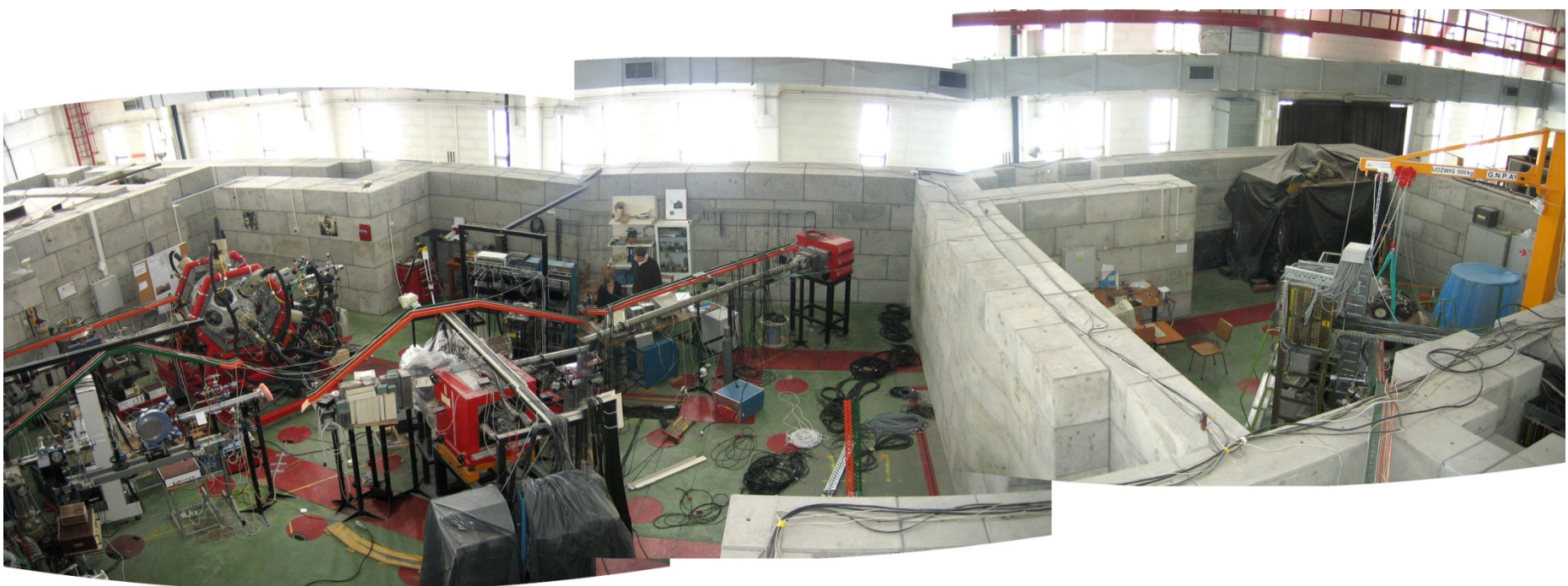




HIL for GANAS



Paweł J. Napiorkowski



CURRENT NUCLEAR RES FACILITIES IN EUROPE



European
for Nucle
(ALICE, A
and ISOL
Genève, S



Electron
Universit



European
for Theor
in Nuclea
Related A
Trento, It



Forschun
Jülich, FZ
Jülich, Ge



Grand Ac
National
(SPIRAL),



Heavy Ion Laboratory
is a research unit of
University of Warsaw
present on NuPPEC map.

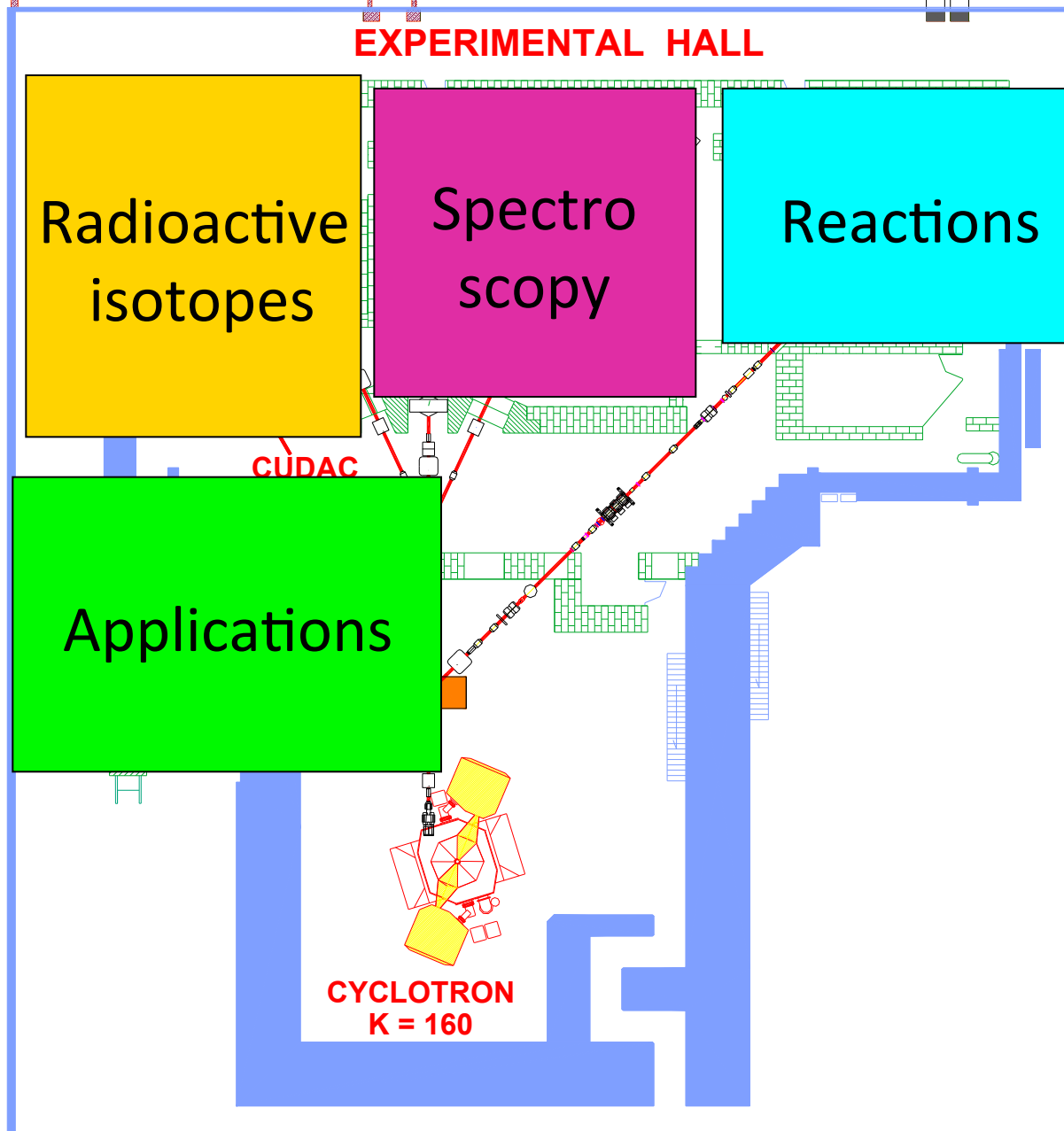
IFJ and HIL Collaboration





Energies $2 \div 10$ MeV/A

Ions $^{10}\text{B} \div ^{40}\text{Ar}$





HIL Staff



Scientists – 13

PhD students – 7

Technicians – 35

Administration - 8



HIL in GANAS

Total budget: 100 k€

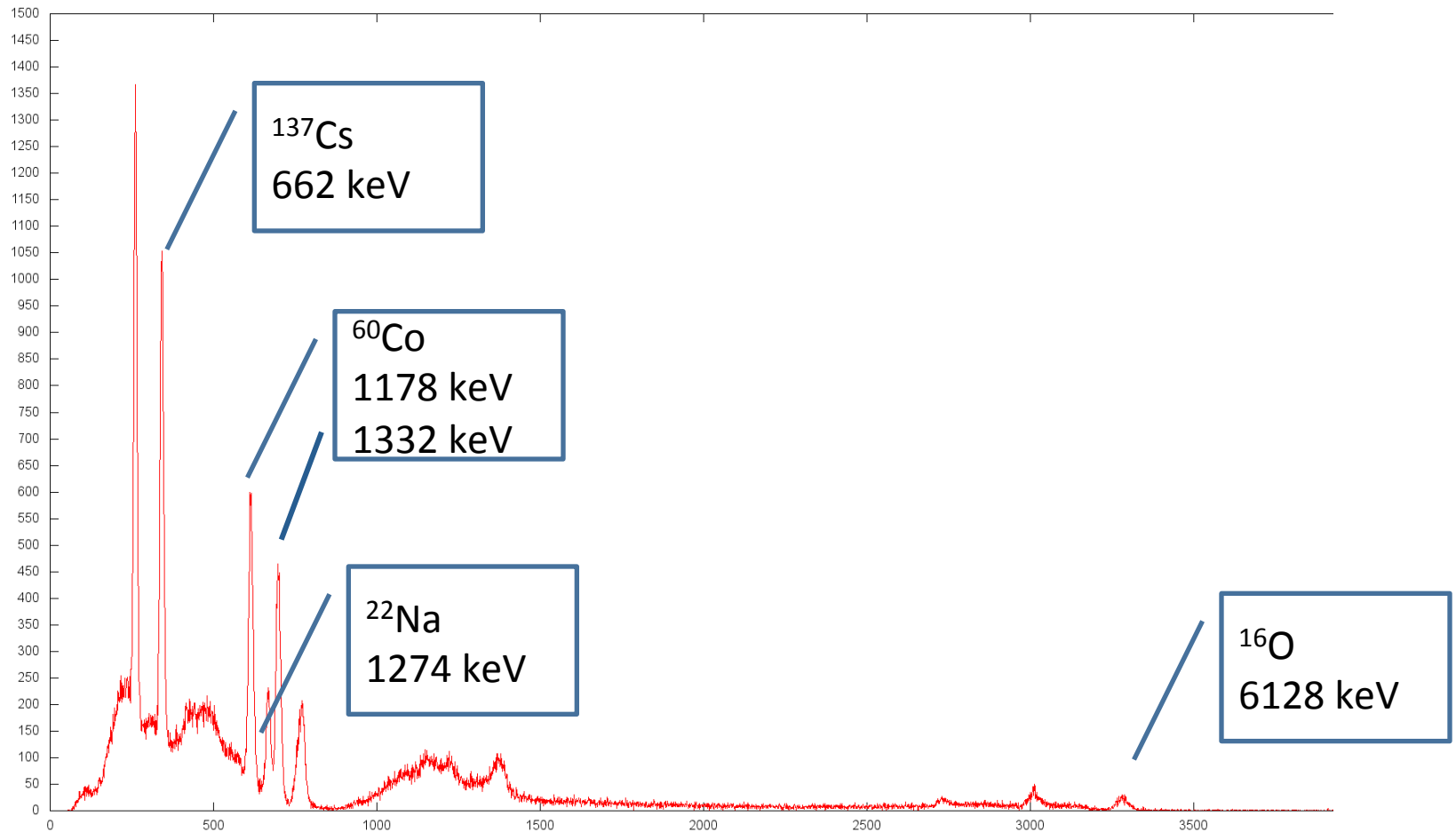
- WP0
- WP1
 - Tests on the beam
- WP3
 - Photon/neutron recognition
 - Algorithms development for digital signal processing
- WP5
 - Software development for phoswich readout
 - Tests on the beam



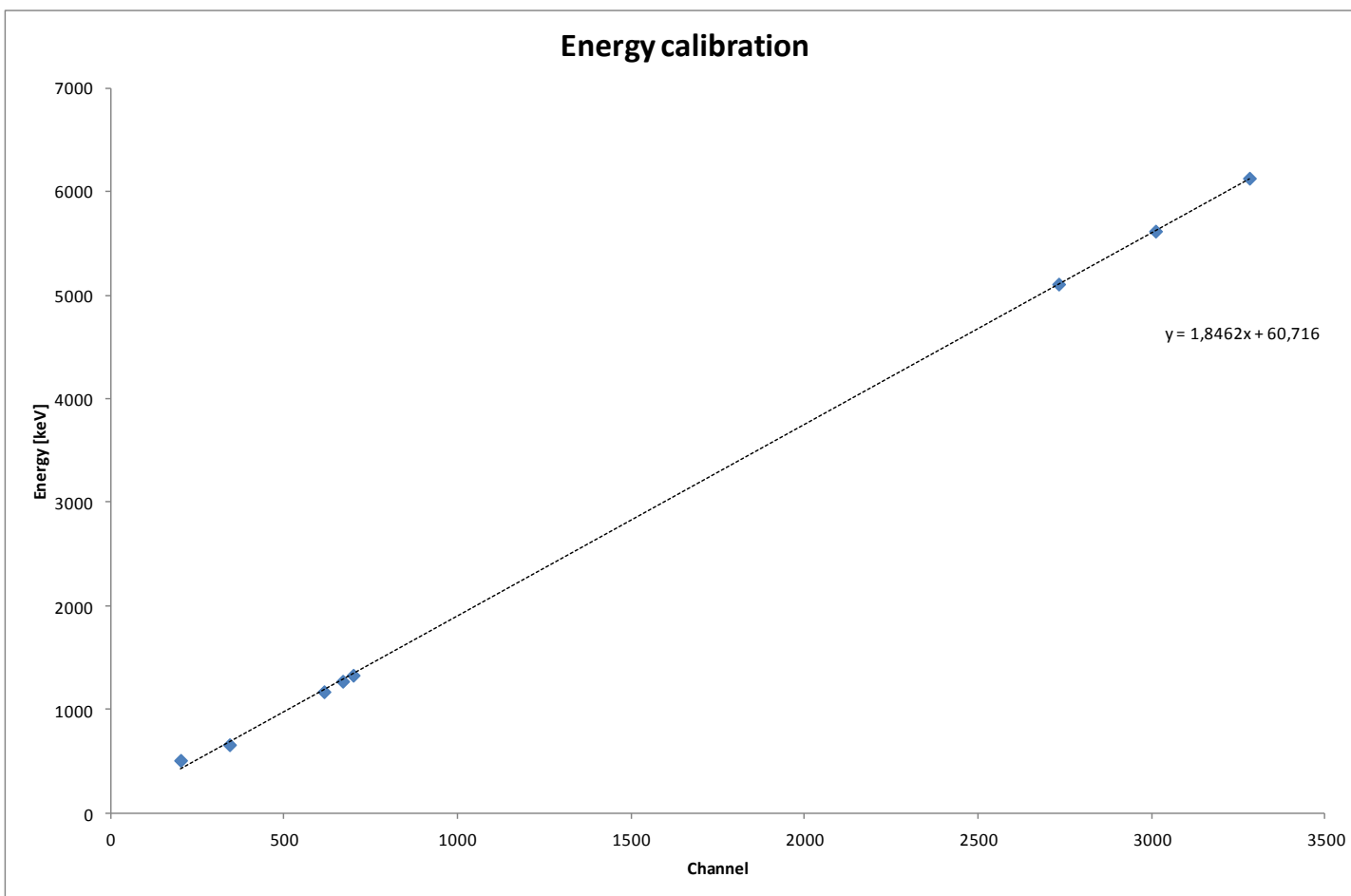
GANAS Team in HIL

- Marcin Palacz
- Grzegorz Jaworski
- Michał Dudeło
- Katarzyna Hadyńska-Klęk
- Radosław Tarnowski
- PJN

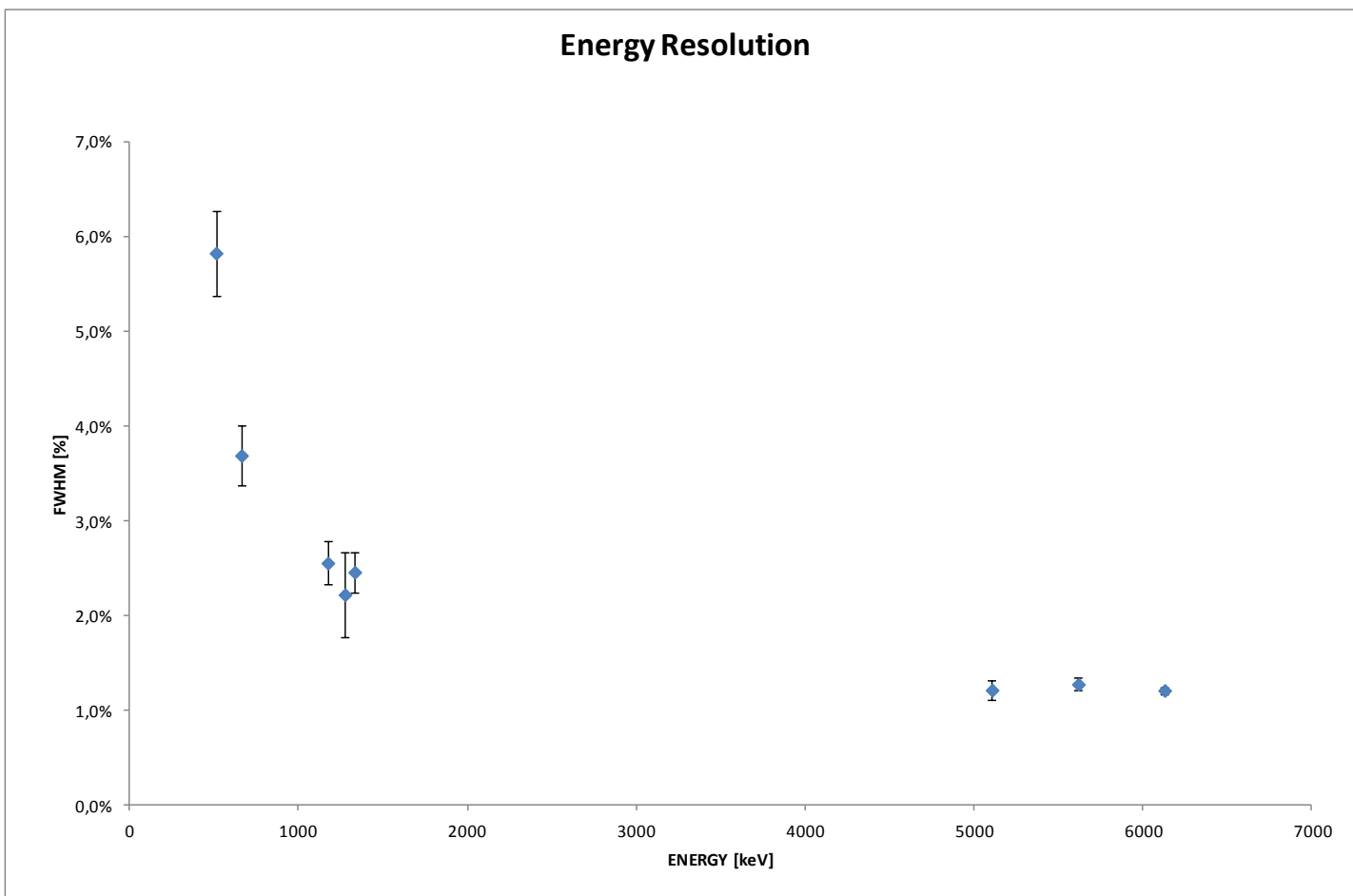
LaBr₃ tests with sources @ IFJ



LaBr3 signal digitized with 4GHz/10bits



LaBr3 signal digitized with 4GHz/10bits



Energy resolution: two types of voltage dividers, with and without preamplifier

DESCRIPTION	VD282K, without preamplification	new VD, without preamplification	new VD, with CREMAT preamplifier
1173 keV (^{60}Co)	3.3 %	2.9 %	2.7 %
2505 keV (^{60}Co)	2.5 %	2.7 %	1.7 % (*)
6128 keV ($^{13}\text{C}+^{244}\text{Cm}$)	1.4 %	1.3 %	1.3 %

Shaping time 0.2 μs

(*) – better statistics