

	B380_2	PW_CsI		PW_NaI	
		LaBr3	CsI	LaBr3	NaI
Energy FWHM (@662 keV)	3.2(2) %	4.2 (2) %	12.7 %	4.0(2) %	8.2%
Timing FWHM (ns)	270	800		680	
Linearity	Yes (sources)	Yes (<1.3 MeV)		Yes (< 12 MeV)	

The adopted strategy to fulfil the PARIS specifications  
is based on  
Cubic PW-NaI : 2"x2"x2" LaBr<sub>3</sub>(Ce) + 2"x2"x6" NaI(Tl)  
coupled with R7723-100 Hamamatsu PM tube

Prototype = cluster of 9 PW-NaI detectors at the end of the year 2011 equipped with Hamamatsu R7723-100 PM tubes coupled with electronics (and DAQ) system : CAEN V1751 digitizer / TNT2-like / NUMEXO / ...

- ▶ assembly all these 9 single PW detectors find a reliable optical coupling
- ▶ take care at the drift from PM+Voltage Divider + LED
- ▶ perform measurements with standard sources and high energy  $\gamma$ -rays to test the add-back algorithm and to compare with simulations
- ▶ strategy on in-beam prototype tests
- ▶ test the cluster under neutron flux
- ▶ test the cluster under high counting rate and see the pileup effect
- ▶ tests other PM tubes : D. Jenkins is in contact with Electron tube company
- ▶ New material ?!