

NEUTRON DETECTOR
SIMULATION FOR
LAMPS-H

Lab Meeting
Tuesday April 12, 2016

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Last Lab Meeting¹

Position and Time Resolution : Hit Position = 1000 mm

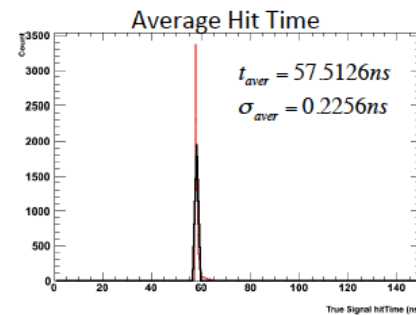
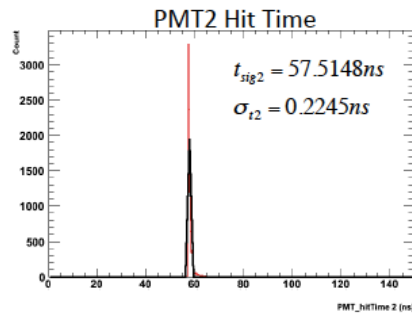
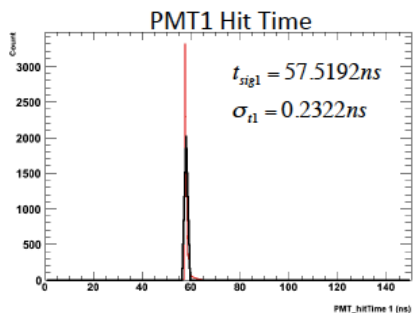
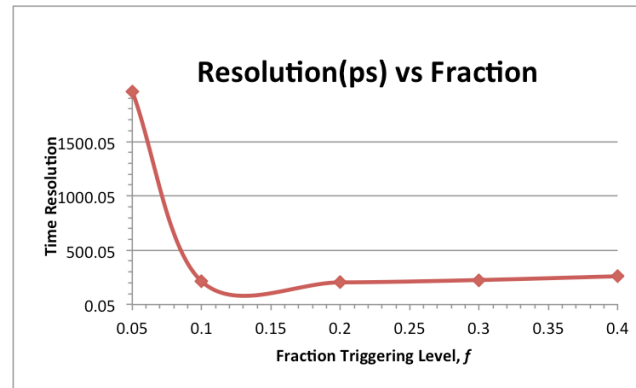
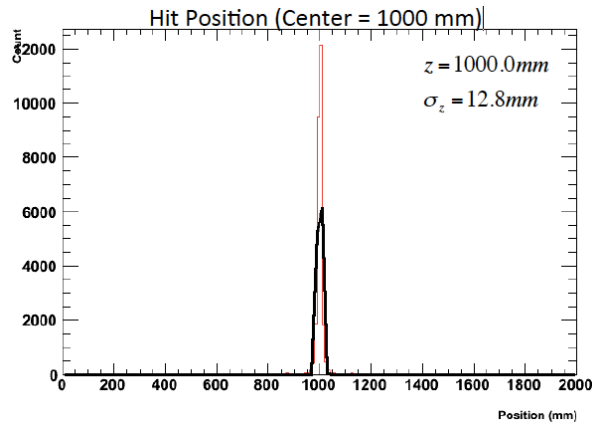


Fig.2: Time resolution for: $f = 0.3$, $t_d = 2\text{ ns}$, $E_N = 300\text{ MeV}$, $z = 1000\text{ mm}$



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1. Last Lab Meeting, March 8, 2016 @ nuclear.korea.ac.kr/
indico

Current Status¹

Scan of different detector hit positions

z_{hit} (mm)	f	t_{delay} (ns)	Time resolution (ps)	Position resolution (mm)
1800	3	2	246	7.8

Tab.1: Time and position resolutions for Constant Fraction Discriminator (CFD) parameters

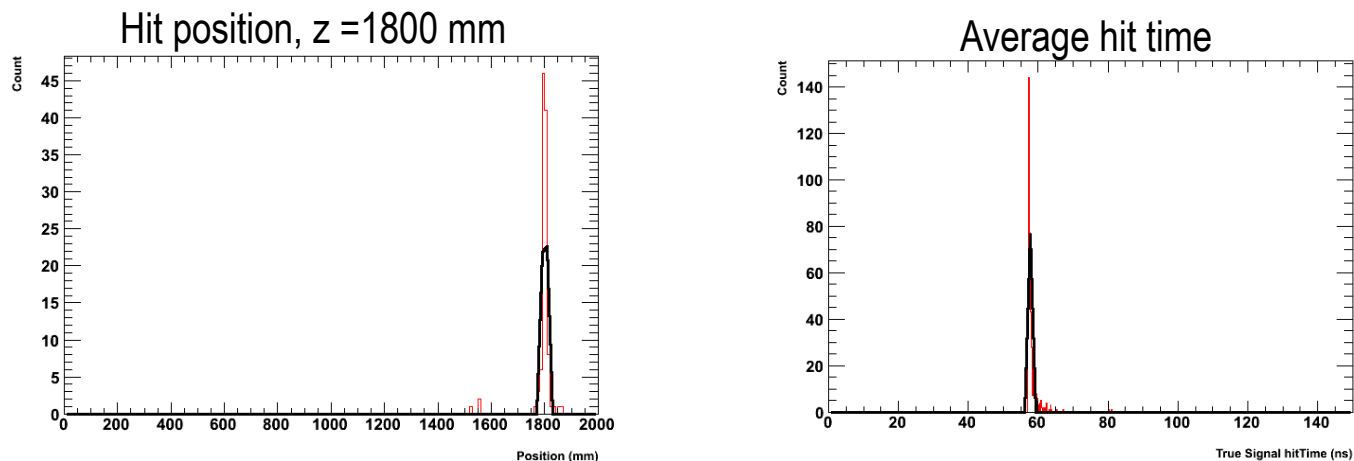


Fig.1: Position and time resolutions for Constant Fraction Discriminator (CFD) parameters



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1. <http://nuclear.korea.ac.kr/indico>

Current Status¹

Scan of different detector hit positions

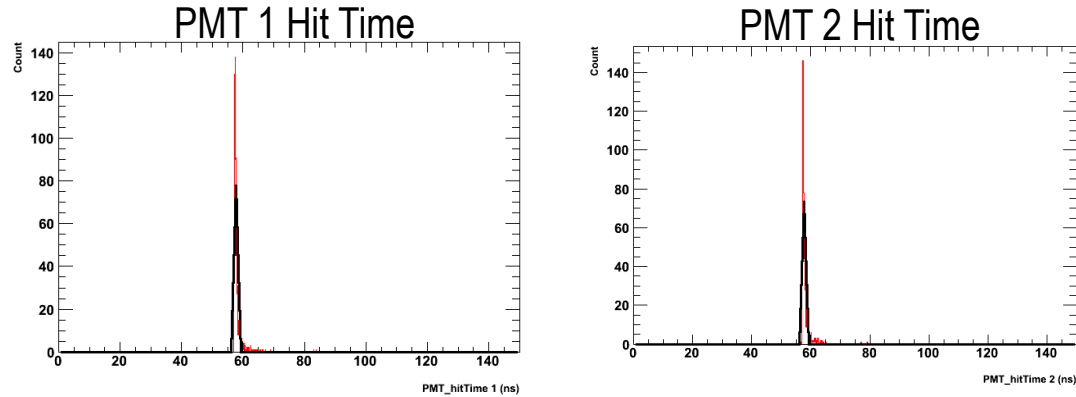


Fig.2: Hit times for PMT 1 (Left) and PMT 2 (Right)

Status:

- Doing simulation study for various detector hit positions.
- Cosmic test.



1. <http://nuclear.korea.ac.kr/indico>