Timing resolution measurements

Timing setup

⁹⁰Sr β-source Set-up:

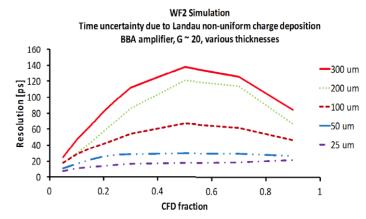
DUT LGAD between source and trigger plane Trigger: either known LGAD or quartz/SiPM Climatic chamber allows operation between -30C and +20C

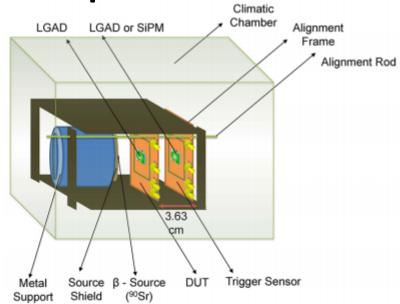
Beam Tests:

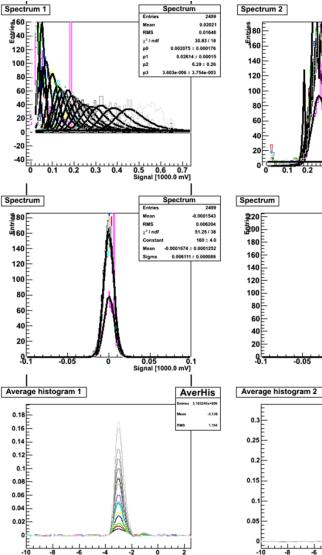
Torino/UCSC Summer 2016 HGTD CERN Fall 2016 US LGAD R&D group FNAL May 2017

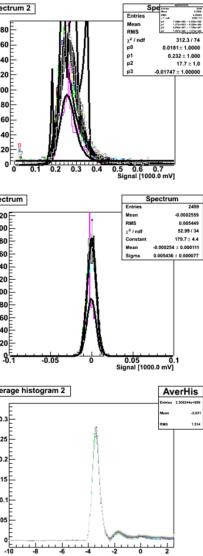
LGAD tested:

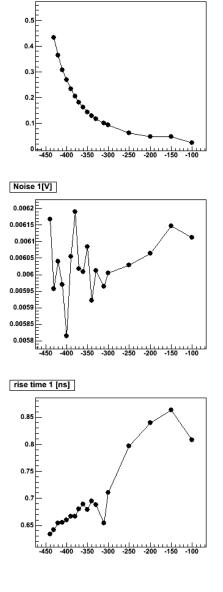
CNM run 9088: 3 doping concentration, 1 mm pads, 2x2 arrays (2x2 and 3x3 mm²) HPK run ECX20840: 4 doping Concentrations, 1mm pads (3 GR configurations), 2x2 arrays, 3x3 mm²



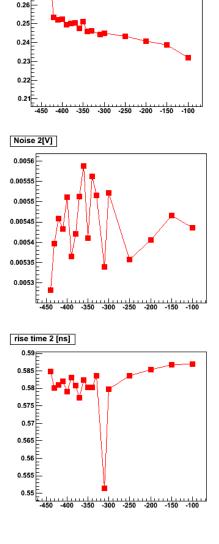








MPV 1[V]



MPV 2[V]

0.28

0.27

