

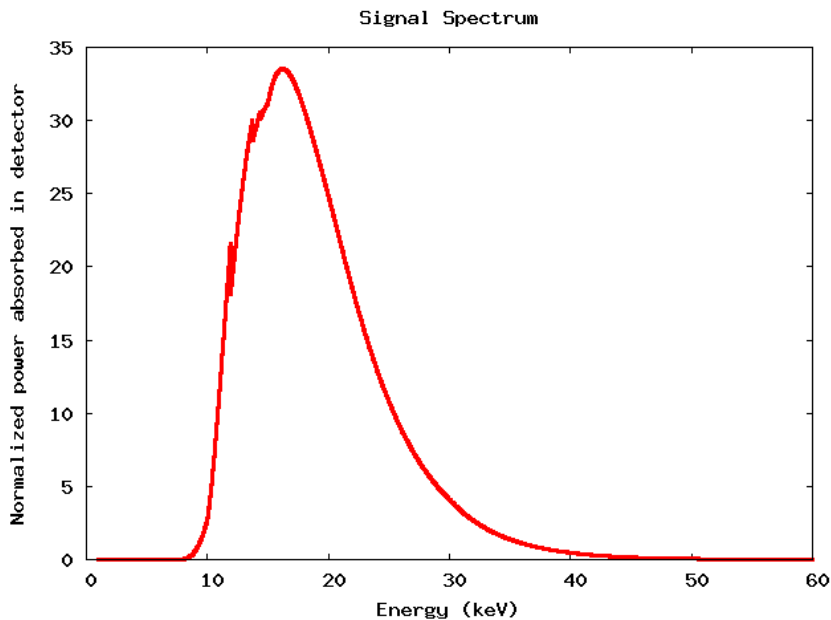
Fluxes on 250 um-deep Si detector at SuperKEKB

J.W. Flanagan

2012.9.19

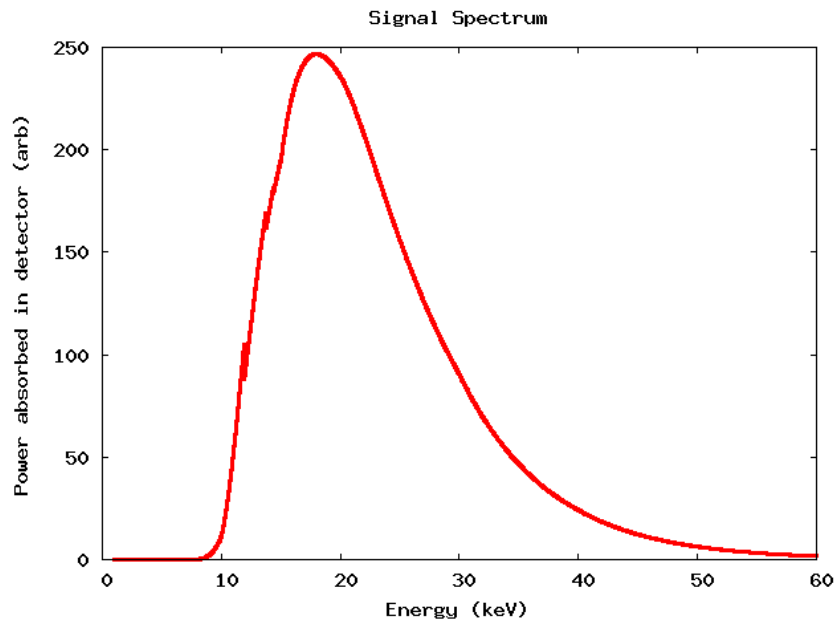
XRM/STURM meeting

Detected signal in 250 μm Si at LER



- Beam:
 - Energy = 4 GeV
 - Bend radius = 31.74 m
- Optics:
 - 10 μm Au mask
 - 625 μm Si substrate
- Beamline:
 - 9+34 m vacuum
 - 200 μm Be window
 - 10 cm Air.
- Flux on detector per 50 μm high x 500 μm wide pixel:
 - Incident: 1,268 photons/turn/mA/bunch
 - Detected: 392 photons/turn/mA/bunch
- Mask/hole contrast:
 - 76%

Detected signal in 250 um Si at HER



- Beam:
 - Energy = 7 GeV
 - Bend radius = 105.99 m
- Optics:
 - 10 um Au mask
 - 625 um Si substrate
- Beamline:
 - 10+29 m vacuum
 - 200 um Be window
 - 10 cm Air.
- Flux on detector per 50 um high x 500 um wide pixel:
 - Incident: 18,967 photons/turn/mA/bunch
 - Detected: 4,097 photons/turn/mA/bunch
- Mask/hole contrast:
 - 69%