Background subtraction, SPR & Cherenkov angle cuts

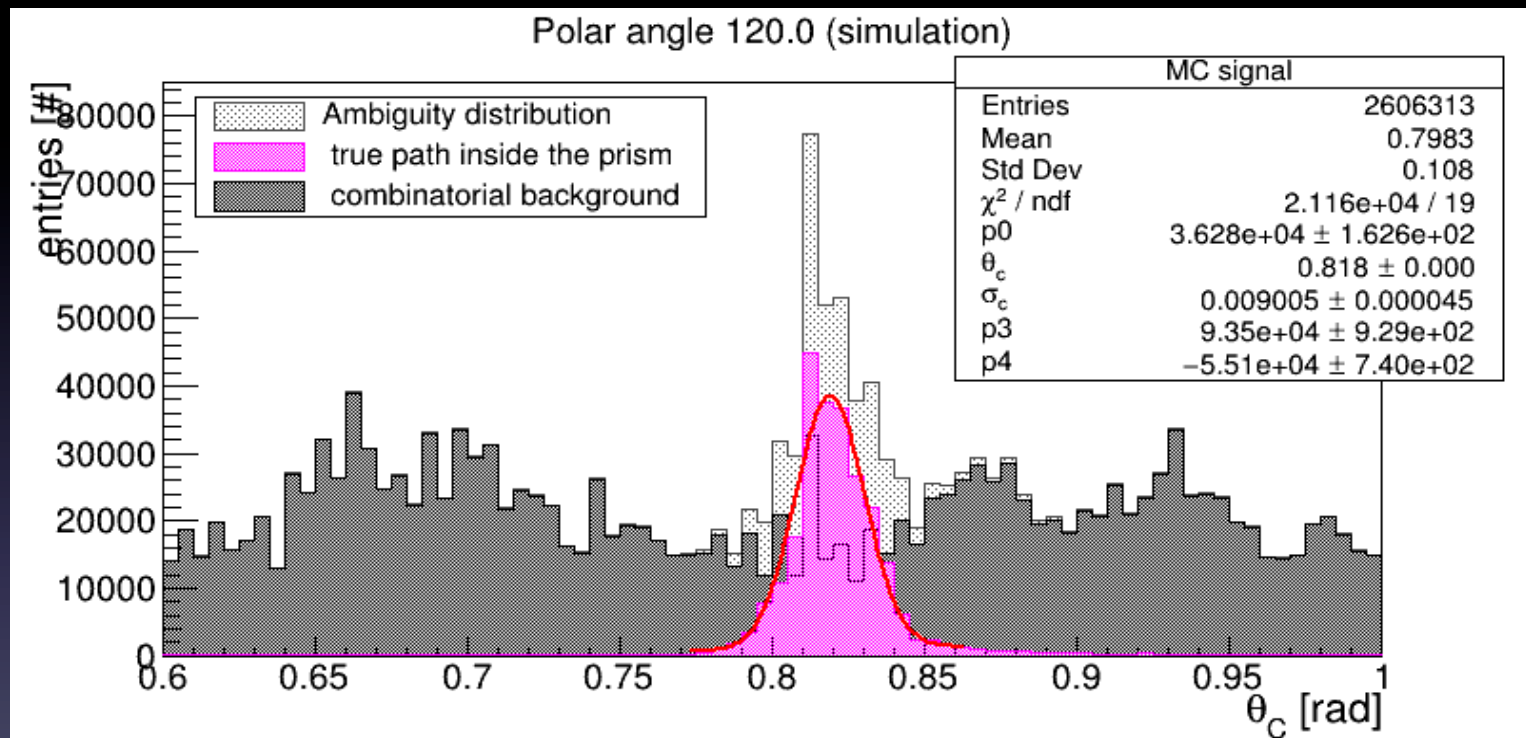A.A

DIRC weekly meeting

23 /11/ 2017

Outlook

- Test beam 2017: bar, 3layer spherical lens, grease, study id 332, 7 GeV/c

- Background subtraction

- SPR after Background subtraction

- Optimizing Cherenkov angle cuts (on going)

- Optimizing time cuts (on going)

Background subtraction

Magenta curve: reconstructed Cherenkov angle from true path inside the prism
Dark gray curve: combinatorial background, (will be subtracted from real date)
Light gray curve: reconstructed Cherenkov angle from all paths inside the prism
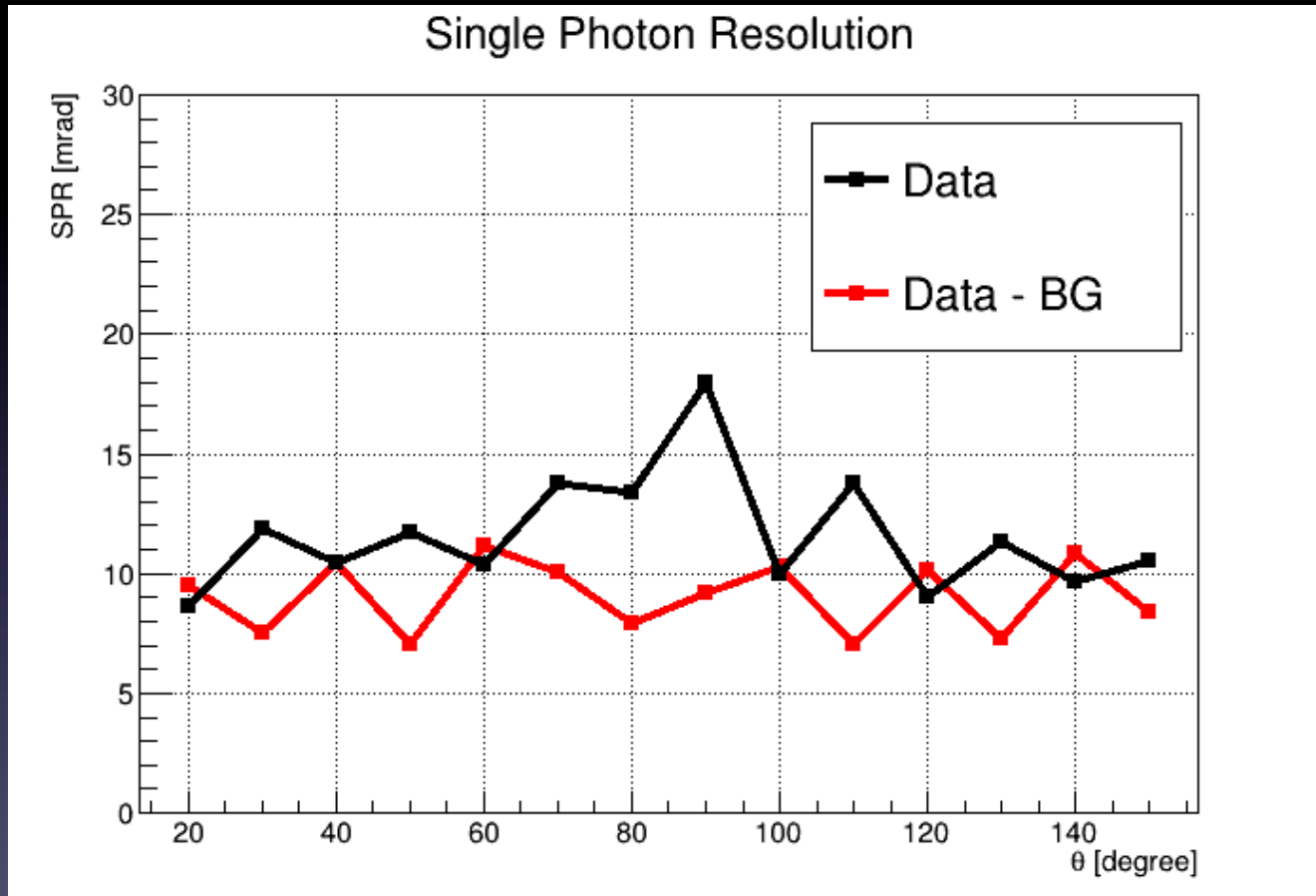
Background subtraction
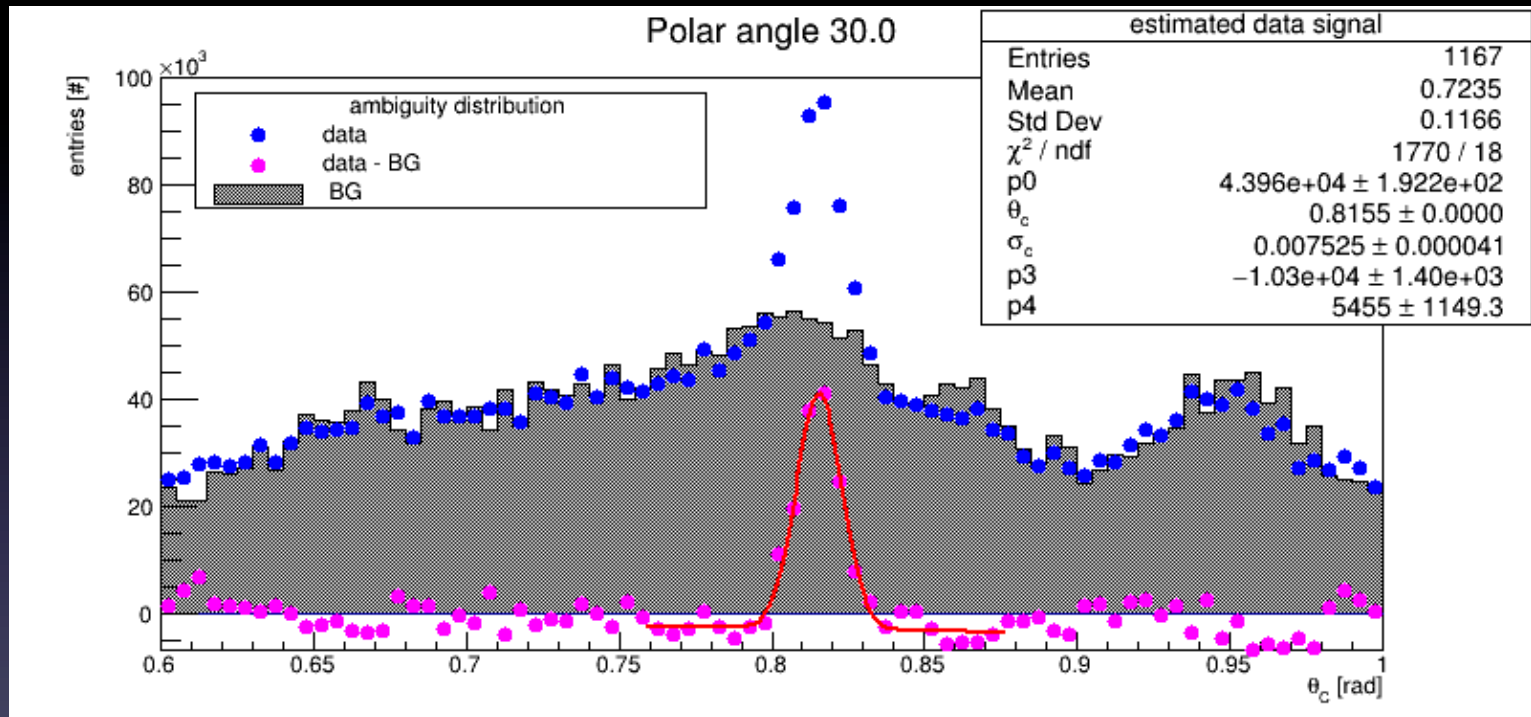
"Background data" and combinatorial background were normalized

Blue points: reconstructed Cherenkov angle from test beam data
Dark gray curve: combinatorial background, (will be subtracted from real date)
Magenta point: data - combinatorial background

SPR

Single photon resolution after background subtraction

Next step

- Optimizing Cherenkov angle cuts (on going)

- Optimizing time cuts (on going)

Thanks