

Summary of topologies, channels and plots

Measurement setup, 04/28/2014

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Topologies

- ▶ $1e$
- ▶ $2e$
- ▶ $1e1\alpha$
- ▶ $1e^-1e^+$
- ▶ $1eN\gamma$ ($N=1,2,3$)
- ▶ $2eN\gamma$ ($N=1,2,3$)

Channels

- ▶ $1e^-$
- ▶ $2e^-$:
 - $2e_{\text{int}}$
 - $1e + 1e$ (two uncorrelated electrons)
 - $1e_{\text{int}} + 1e_{\text{ext}}$ (crossing electron with charge misidentification on one track)
- ▶ $1e1\alpha$ (same/different vertices, prompt/delayed)
- ▶ $1e1p$:
 - $1e_{\text{int}}1p_{\text{int}}$
 - $1e + 1p$
 - $1e_{\text{int}} + 1p_{\text{ext}}$ (crossing electron)

Channels

$1e1\gamma$

- ▶ $1e_{\text{int}}1\gamma_{\text{int}}$
- ▶ $1\gamma_{\text{ext}} + 1e_{\text{int}}$
- ▶ $1e + 1\gamma$

$1e2\gamma$

- ▶ $1e_{\text{int}}1\gamma_{\text{int}}1\gamma_{\text{int}}$
- ▶ $1\gamma_{\text{ext}} + 1e_{\text{int}} + 1\gamma_{\text{int}}$
- ▶ $1e1\gamma_{\text{int}} + 1\gamma$
- ▶ $1\gamma_{\text{ext}} + 1e_{\text{int}} + 1\gamma$
- ▶ $1e + 1\gamma + 1\gamma$
- ▶ $(1\gamma_{\text{ext}} + 1e_{\text{int}} + 1\gamma_{\text{ext}})$

$1e3\gamma$

- ▶ $1e_{\text{int}}1\gamma_{\text{int}}1\gamma_{\text{int}}1\gamma_{\text{int}}$
- ▶ $1\gamma_{\text{ext}} + 1e_{\text{int}} + 1\gamma_{\text{int}} + 1\gamma_{\text{int}}$
- ▶ $1e_{\text{int}}1\gamma_{\text{int}}1\gamma_{\text{int}} + 1\gamma$
- ▶ $1e_{\text{int}}1\gamma_{\text{int}} + 1\gamma + 1\gamma$
- ▶ $1\gamma_{\text{ext}} + 1e_{\text{int}} + 1\gamma_{\text{int}} + 1\gamma$
- ▶ $1\gamma_{\text{ext}} + 1e_{\text{int}} + 1\gamma + 1\gamma$
- ▶ $1e + 1\gamma + 1\gamma + 1\gamma$
- ▶ $(1\gamma_{\text{ext}} + 1e_{\text{int}} + 1\gamma_{\text{int}} + 1\gamma_{\text{ext}})$
- ▶ $(1\gamma_{\text{ext}} + 1e_{\text{int}} + 1\gamma_{\text{ext}} + 1\gamma_{\text{ext}})$
- ▶ $(1\gamma_{\text{ext}} + 1e_{\text{int}} + 1\gamma_{\text{ext}} + 1\gamma)$

Channels

$2e1\gamma$

- ▶ $[1e1\gamma] + 1e_{\text{int}}$
- ▶ $[1e1\gamma] + 1e_{\text{ext}}$

$2e2\gamma$

- ▶ $[1e2\gamma] + 1e_{\text{int}}$
- ▶ $[1e2\gamma] + 1e_{\text{ext}}$

$2e3\gamma$

- ▶ $[1e3\gamma] + 1e_{\text{int}}$
- ▶ $[1e3\gamma] + 1e_{\text{ext}}$

Plots

- ▶ Total energy ($\sum E_i$)
- ▶ E_i , $\sum E_{\gamma i}$, E_i vs E_j , *etc.*.
- ▶ α track length, electron track length
- ▶ $\cos\theta_{e-e}$, $\cos\theta_{e-\gamma}$, *etc.*.
- ▶ $\Delta t_{e-\alpha}$

Summary

- ▶ More than 60 channels leading to more than 500 plots