

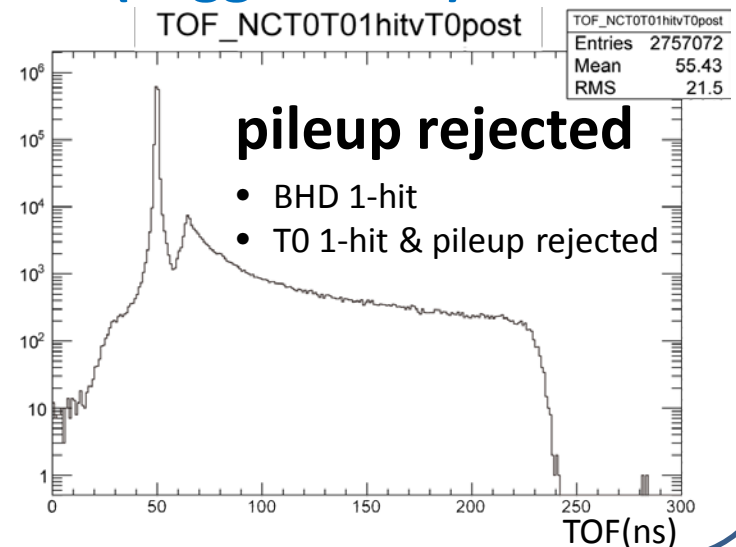
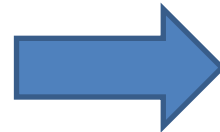
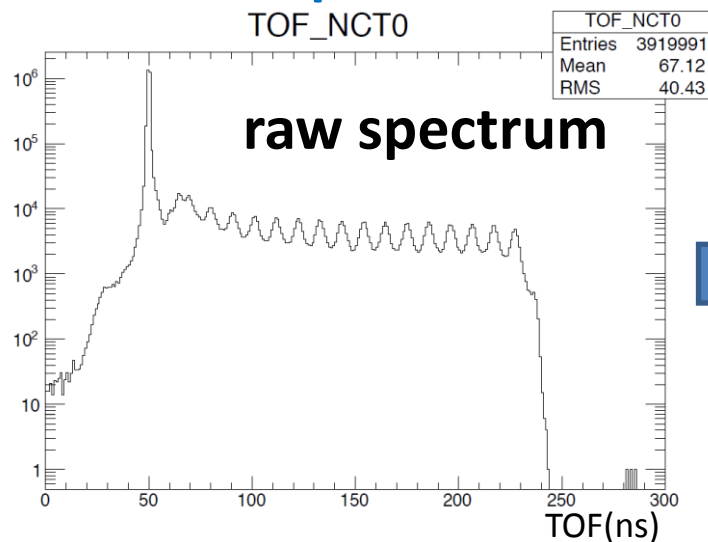
**J-PARC Hadron Hall : EXPERIMENTAL REPORT on RUN#46**

		<b>Date(submitted)</b>	2013/01/25
<b>Group</b>	E15	<b>Beam line</b>	K1.8BR
<b>Reporter</b>	<b>Name</b>	<b>e-mail address</b>	
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<b>Experimenters</b>	Kyoto-U: Y.Sada Osaka-U: S.Enomoto, K.Inoue, S.Kawasaki, H.Noumi, T.Yamaga RIKEN: Y.Ma, F.Sakuma TITECH: M.Tokuda U-Tokyo: T.Hashimoto, M.Sato		
<b>Summary and Results</b> Production target : Au  ✓ beam-line study, engineering run @ -1.0GeV/c $\pi/K/p$ [K1.8ES1= $\pm$ 250kV] <b>Jan.16-17</b> ✓ beam-line (magnets and slits) study ✓ engineering run with full-setup ( $^3\text{He}$ -target)			
<b>SCHEDULED and EXECUTED MACHINE TIME, BEAM CONDITION, DOWN TIME, Priority etc.</b> ■ Jan.16 9:50 ~ Jan.17 9:00: tot 23:10 (including 0:20 downtime), 15kW  Total 23:10 (including 0:20 downtime)			
<b>Comments/Requests</b>			

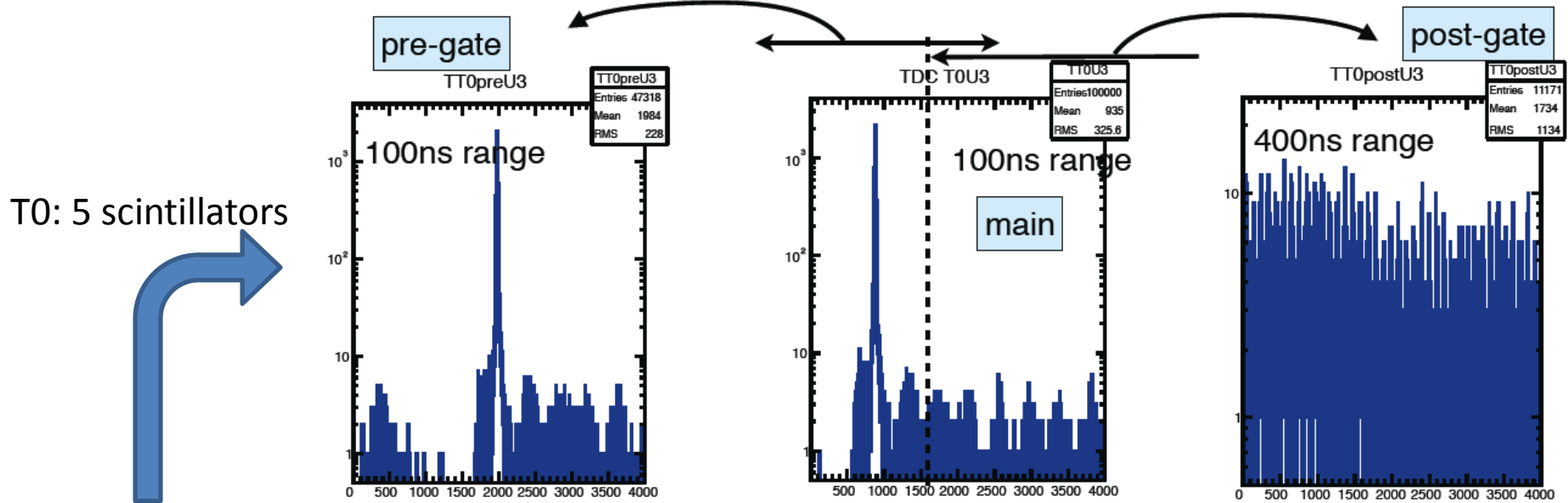
# preliminary results of Run#46

- 2<sup>nd</sup> engineering run in 21-22 Jan.
  - production: 11h @ 14.5kW → 6.6kW\*day
    - cf. 30kW\*week = 210kW\*day
  - 500 M K<sup>-</sup> on target
- Background study for forward neutrons
  - ~100MHz beam structure caused by the transverse-RF is a big issue in the missing mass spectroscopy for E15
    - $\gamma(/n)$  from pileup pions makes ~100MHz structure in the forward-neutron TOF-spectrum
  - **Pileup rejection circuit in the beam trigger seems to work well, however we have to study more carefully in the online analysis**

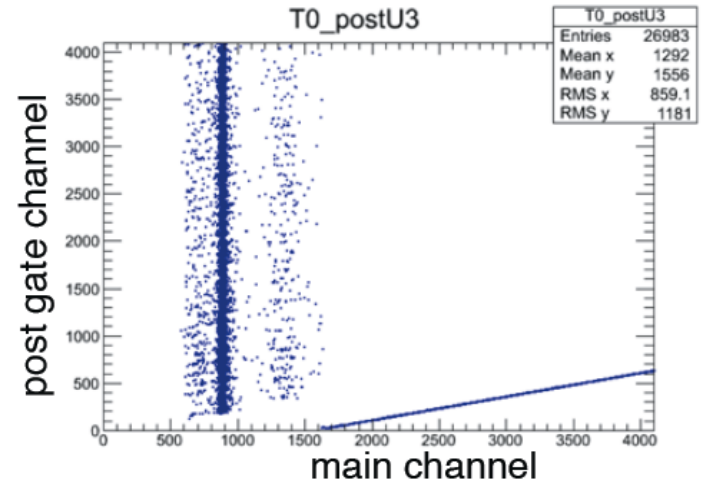
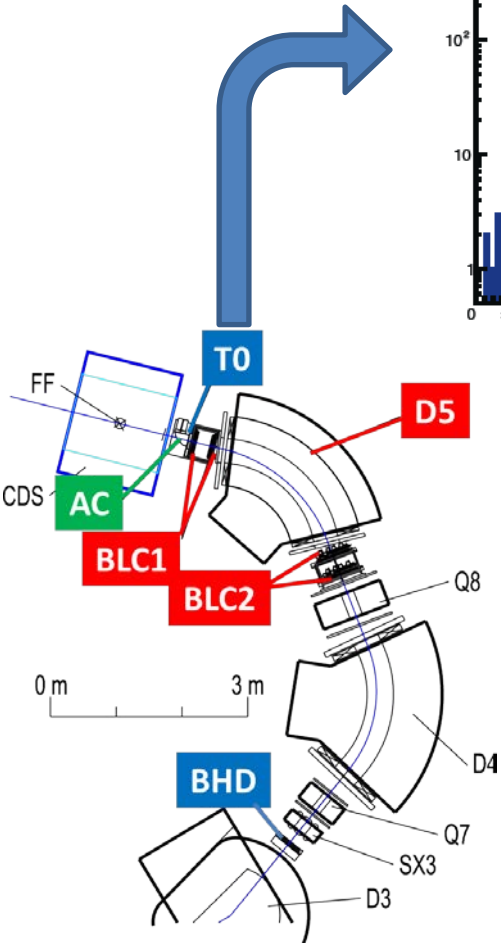
## TOF spectra between T0 and NC (trigger level)



# Appendix1: Pileup rejection circuit

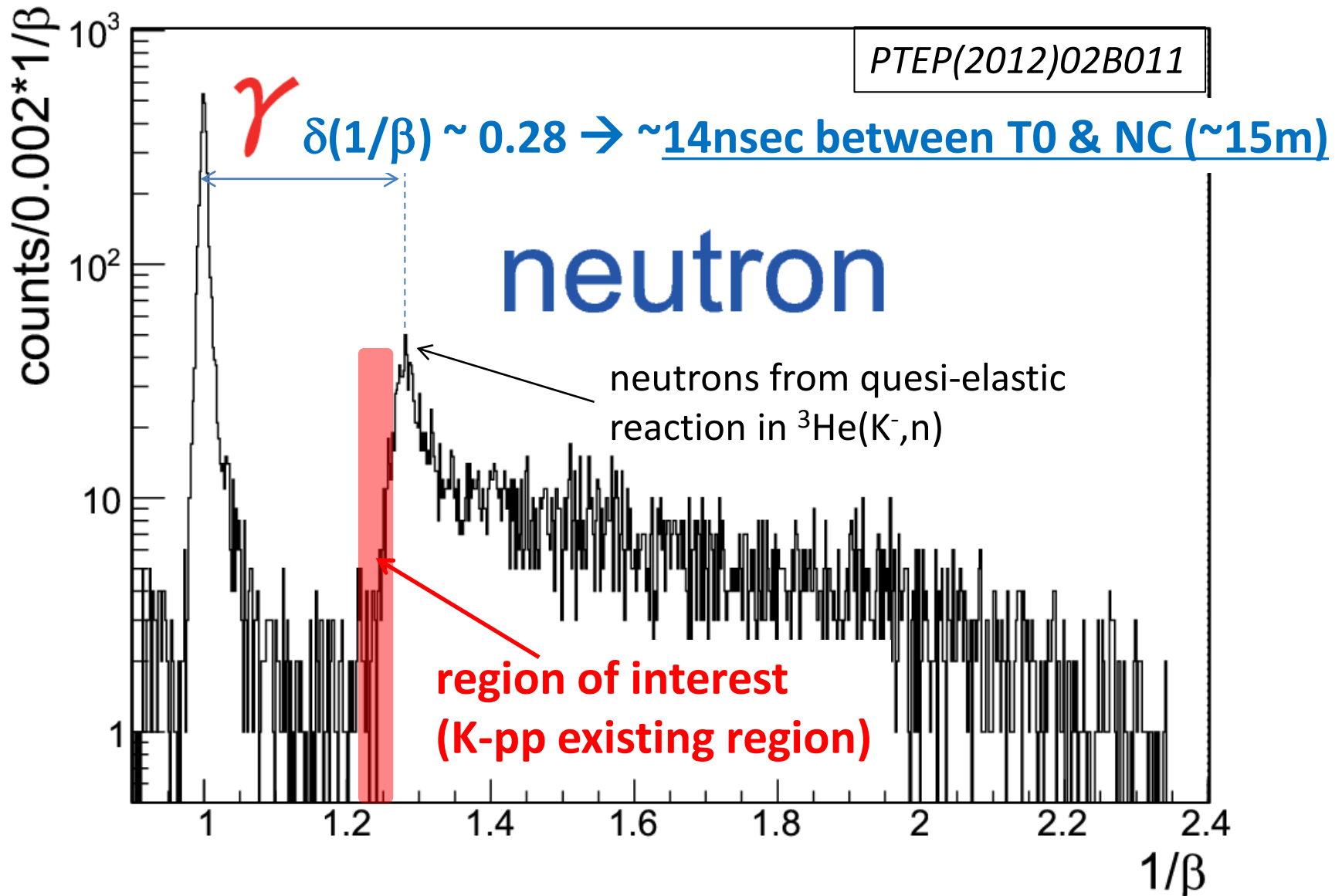


T0: 5 scintillators



# Appendix2: What is the problem?

1/ $\beta$  spectrum of the neutral particles obtained by the NC @ RUN#43



# What is the problem? (Cont'd)

“Raw” TOF-spectrum obtained by the NC @RUN#46

