DC & MWPC
Simulation and Digitization

Fermilab Meeting, Feb 2004

Sin Man Seun (Sharon)

- Imported code from SELEX for MWPC hits and digitization code to MC

  Using GEANT subroutine GPMWPC for digitization

  - Outputs: wire number (1-640) & cluster size
- Completed DC1-4 hits and digitization code

  Using GEANT subroutine GPDRIF for digitization

  - Set drift velocity = 0.00591cm/nsec
  - Outputs: wire number & drift time
- Added sub-detector Event Display for DC & MWPC

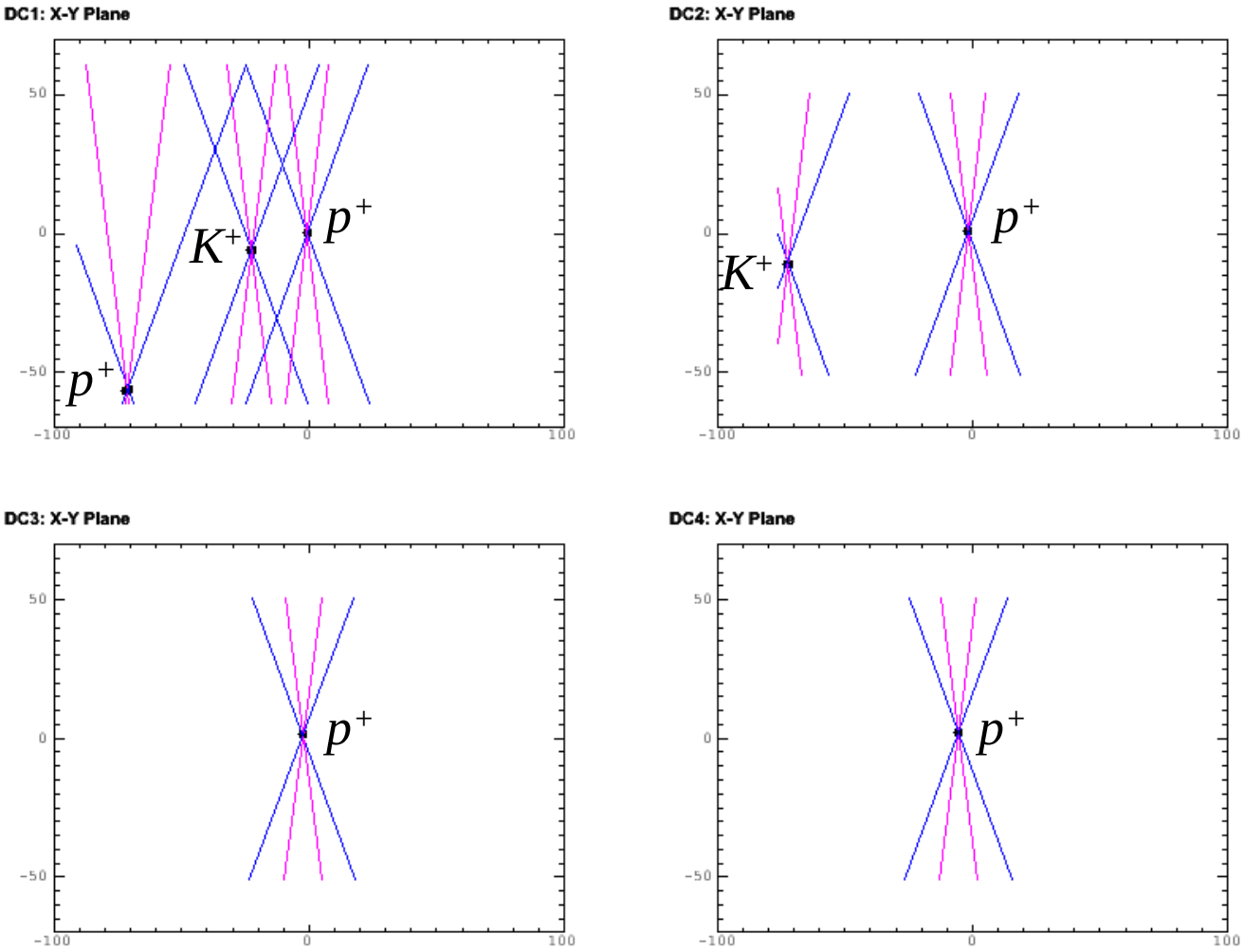
DC Event Display

MIPP (FNAL E907)

Run: 1
SubRun: 0
Event: 3

Fri Feb 13 2004
17:05:42.144460

Version: 0
Trigger: 0



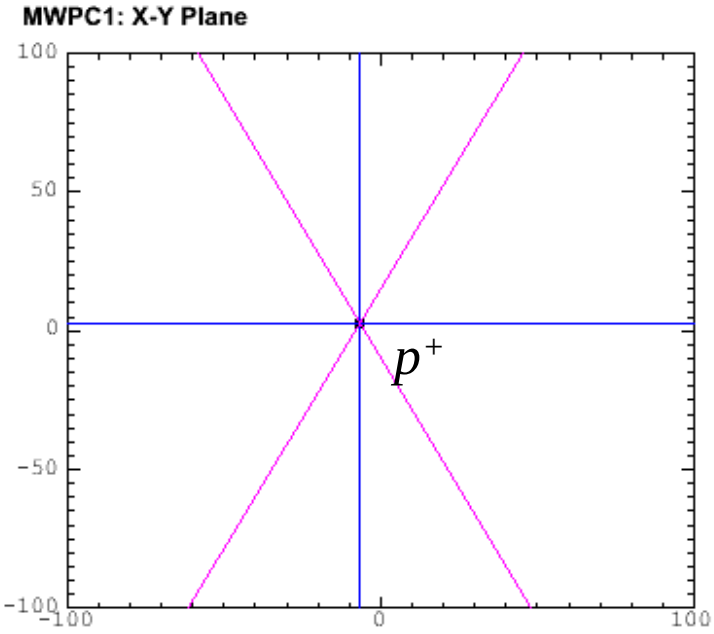
MWPC Event Display

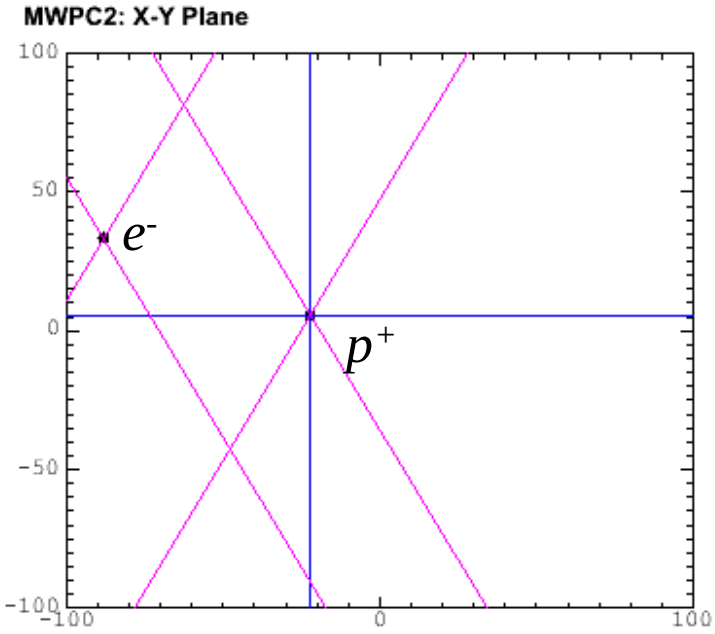
MIPP (FNAL E907)

Run: 1
SubRun: 0
Event: 3

Fri Feb 13 2004
17:05:42.144460

Version: 0
Trigger: 0





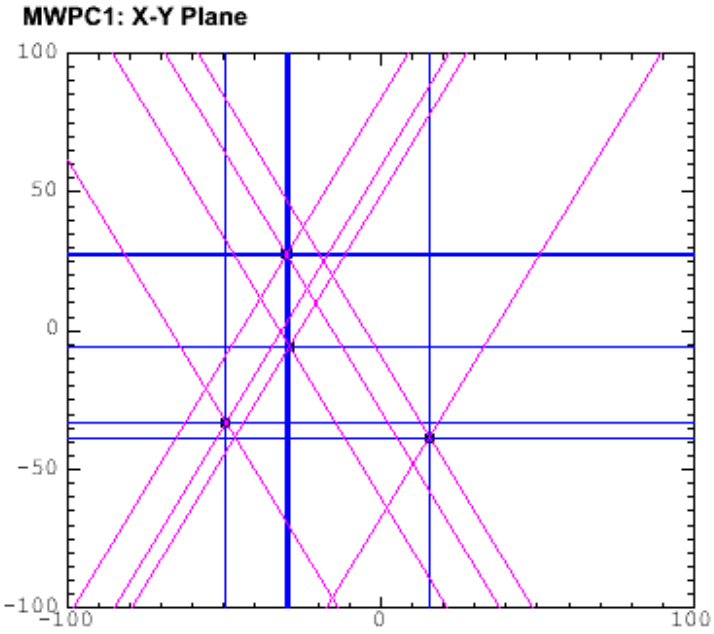
MWPC Event Display

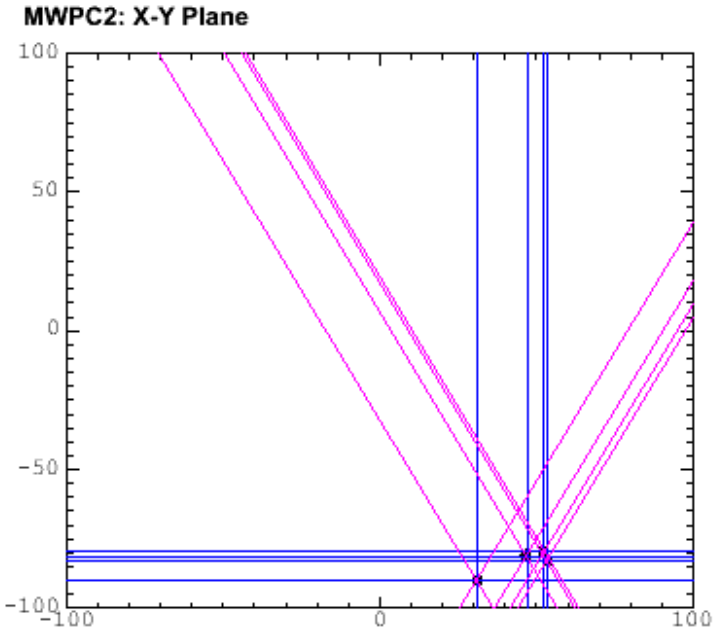
MIPP (FNAL E907)

Run: 1
SubRun: 0
Event: 2

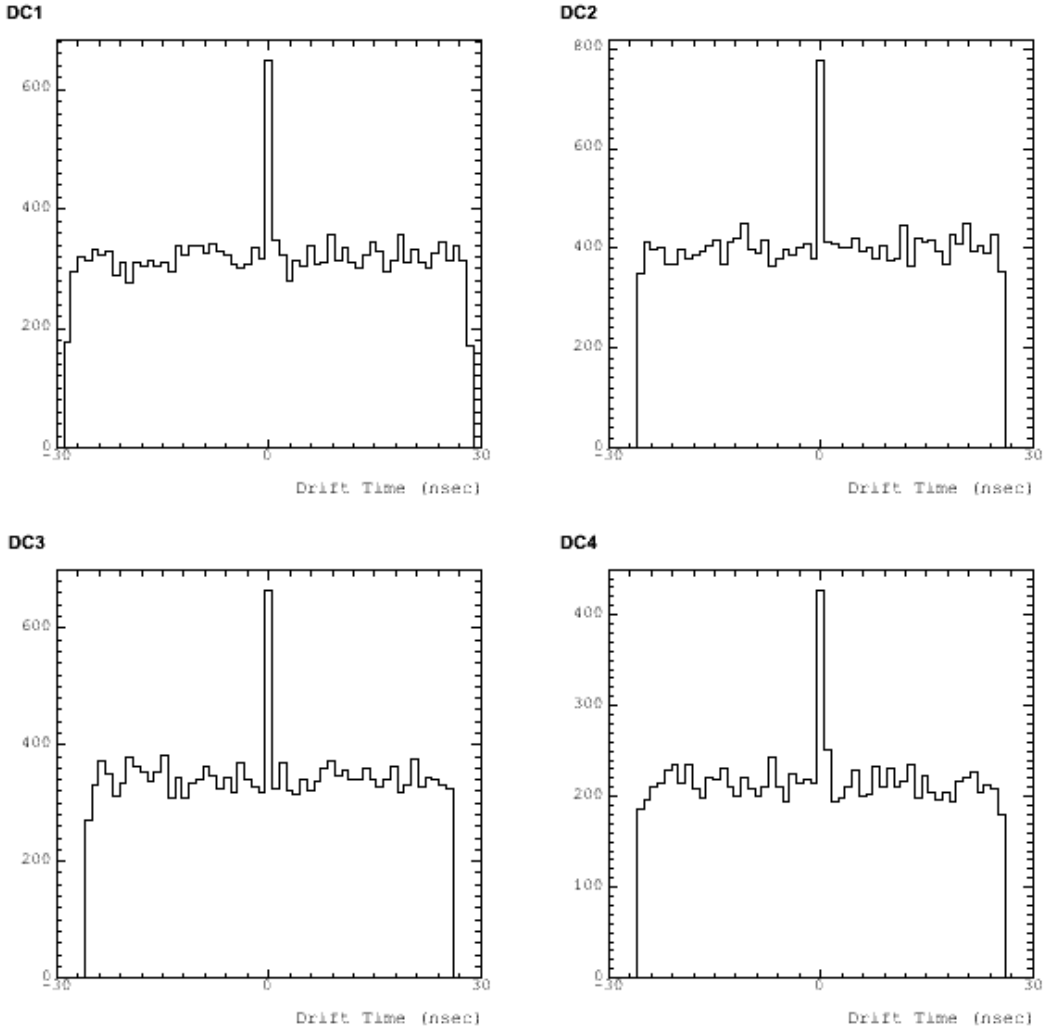
Fri Feb 13 2004
17:05:32.765104

Version: 0
Trigger: 0





TDC Distributions for DC 1-4 (1000 events)



Conclusion

- Simulation and digitization for DC and MWPC completed
- Event displays for DC and MWPC ready for use
- Feedback is appreciated!!!