

Pixel Online Software
SLink Test & Run Control Integration
(We're almost there!)

Souvik Das
(Cornell University)

Results and Some Solutions

- ✓ Emulated Physics (test-DAC) data does go from the FEDs via the S-Link through the FRLs and DAQ system to the Storage Manager!
- ✗ But more events are seen at the Storage Manager than there were Level 1 triggers sent by the LTC. We tried random and equidistant triggers but we got the same problem in both cases. For 100 Hz equidistant triggers we got $\sim 1.8\%$ extra events. We suspect it has something to do with the “TTCci Clock not locked” we see on the PixelTTCSupervisor. Andre Holzner has been contacted for help with this.
- ✓ FED ID 4 could not be configured. Problem was traced to a bad clock & trigger fibre which will be replaced.
- ✗ FED ID 11 was giving CRC errors.
- ✗ First event shows CRC error for all FEDs.
- ✗ The PixelFunctionManager goes into “Configured” state just after one crate gets configured! This is strange because the PixelSupervisor doesn't go into the “Configured” state at that point, so PixelFunctionManager is looking for some other attribute of PixelSupervisor to update its status or its some weird SOAP message interference. Will look into this.
- ➔ The SLink card firmware on all the Pixel Barrel FEDs were updated to the latest by Hannes Sakulin.