9U ROD (Again)

NOUN: rod

ETYMOLOGY: Middle English, from Old English *rodd;* akin to
Old Norse *rudda* club …

3 (a)A stick or bundle of sticks or switches used to give
punishment by whipping.

3 (b) Punishment; correction.

4. A scepter, staff, or wand symbolizing power or authority.

C .N .P .Gee

Rutherford Appleton Laboratory

Post²-PDR Issues

- **Document now at Version Draft 0.7c. 82 pages.**
- **Many issues fixed:**
  - Lots of comments from reviewers (thanks to Eric for help).
- **Detailed register model, including VME64x configuration space.**
  - Thanks to Panagiotis for advice.
  - A little tidying up still needed, inside each FPGA.
    - *Probably more changes as firmware is developed.*
- **Outstanding decision on pins for Geoadd**
  - No benefit in making it same as PPR?
  - CANBUS, TTC not documented – should use same as ALC

Remaining Details

- **Event Formats (yes, still)**
  - Must match CPM, JEM, CMM G-Link formats.
    - *Asking DPCS to help with this.*
- **Details of data rates**
- **Details of bits in registers**

- **How many to make in the first batch for slice/test beam.**
  - Initially 1, then 2 more?

- **Division of firmware responsibility**
  - And where the firmware is stored (not only a ROD issue).

Future use of 6U ROD/ Data Formats

- **Timetable for 9U ROD means 6U ROD continues in use for tests**
  - and probably in test beam, accompanied by 1 9U ROD
- **Data formats are different and incompatible.**
  - Block header handles different no of slices from different parts of a module. Sub-status zero suppressed if no error.
- **Once formats are agreed, should we update 6U rod formats?**
  - Answer: Discuss: probably: hard to survive with old and new formats co-existing in analysis (on-line and off-line).
    - *But we are in trouble if we can't survive like this in future.*
    - *The old format did not foresee a per-module event format version. This is included in the new block header.*