Here are the topics I plan to cover in my presentation:

1. Future tools for FPGA development and upcoming design flows.
   Xilinx and Altera marketing
   HLS, systemgen, opencl and others.
   Why VHDL is still relevant and powerful.

2. Techniques for accelerating and simplifying FPGA development
   Lessons learned in past experiments
   Possible options going forward.
   Generating open source libraries and tools
   Reusable modules, partial reconfiguration, etc.

3. FPGAs in the cloud
   How the push for cloud FPGAs can be adopted for DAQ
   Available hardware
   Alternatives for on site clusters
   Areas of possible R&D into clustering FPGAs as a shared resource

3. Machine learning in FPGAs.
   Current trends for using FPGAs in ML
   Possible areas of R&D for DAQ systems
   How to leverage the market and adapt aspects for our needs
   How ML networks match well to DAQ structures.

-Ryan