

Summary: Instrumentation QBPMs, Magnet Movers and Remote Shift Participation

> Justin May SLAC



- Code development and testing underway at SLAC and RHUL
- Final system will serve EPICS PVs to ATF control system (SLAC/RHUL responsibility)
- Work will begin soon on determining EPICS database structure
- Test stand to be installed May '07
 - Will be used to test "first pulse operation" scheme, BPM processing algorithms, and mover control and read back

Additional Tests and Comments

- Tests might indicate preferred number and location of reference cavities
- BPM signals should be available in X,Y and I,Q
- Consider using Fiber Loss Monitor in extraction line
- Measure mover response time
- Measure structural motion of BPM/quad on test stand
 - Compare with ground motion measurements and simulation

Remote Shift Participation

- State of technology and protocols for distributed site operation needs investigation
 - GANMVL may have made progress; are they ready to start testing?
- SLAC ILC-Instr. group and ATF already have some experience
 - First, off-site analysis of NanoBPM data (~1 hr latency)
 - More recent, and more effectively, remote shift participation with RingBPM studies (real-time)
- SLAC will continue to develop this mode of operation
 - Shifts during upcoming May'07 work
- For now, what's needed is web cams, chat/VOIP clients, and depending on operation, VPN access
 - AIM and Skype, Cisco VPNClient and account



4