

ProtoDUNE-SP integration meeting
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Weekly report from DCS group

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for slow controls group

- **Cameras:** talked to Sebastien Murphy about the 3x1x1 cameras
 - FPS strongly depends on cable length (can go up to ~20 FPS)
 - DP uses an **automated** program to **detect sparks**: compared current frame to previous frame and looked for luminosity difference, but need a minimum FPS (to be understood)
 - **Issue:** camera focus changes when the cameras are in cold, but focus can only be adjusted manually so must adjust it before insertion
- **Cable shielding:** clarification needed
 - Discussion started in the context of T-gradient monitor but it seems it affects all subsystems
 - Discussing with Linda Bagby, Theresa Shaw and Xavier Pons (CERN) the type of shielding that should be used for cables inside cryostat
 - **Teflon** (PTFE) jacketed cable doesn't meet the CERN safety norm IS23 and **contains fluorine** (requires anyhow a derogation from CERN safety)
 - Could ask a derogation if there is no choice. Otherwise **a good alternative is kapton** (Polyimide).
 - Apparently there is some confusion since Marzio Nessi stated that "CERN would not accept halogenated cables unless we could show they would be accepted at the DUNE Far Detector site"