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Summary from Precision Science

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Precision Science WG

- 3 meetings so far, one more upcoming to summarize
- Many topics for future experiments covered
  - Mu2e-II
    - X10 improvements on Mu2e
    - Had a serious of prior workshops dedicated
    - Challenges in target and extinction
  - Other CLFV
    - Currently under various stages of planning at PSI
    - Exploit PIP-II available intensities
  - REDTOP
    - Rare eta decays to search for new physics
  - Proton EDM
    - 500m circa. E-ring, goal 10^{-29}e-cm

Precision Science WG

- Dark Sector with SeaQuest
  - Dark photon searches with displaced vertices
- LDMX
  - Searches for dark sector with missing momentum

R&D

- Radiation hard electronics
  - Component qualifications is needed
- Fast rad hard calorimeter
  - <10% energy resolution and 500ps timing
  - ~1MRad and 10^{13}n_1MeV/cm^2
    - Including photosensors
- Ultra low mass tracker
  - <0.1% X0 with <100ps TOF tracking for PID
- High efficiency cosmic ray veto system
  - >99.99% efficiency, neutron fluency issue on SiPM/scintillator
- High power, rad hard POL delivery
  - Radiation and B-field hard DC/DC converters
- Sub-ns electronics/trigger