

# SMT Hardware & Firmware Studies

- **\* Test-stand**
  - HDI
    - study R/O with logic analyzer
    - LV regulation
    - ped vs. tick
    - R/O abort
  - R/O electronics:
    - AC-IB-SEQ hardware and firmware
    - timing/FEB reduction
    - tick info in SEQ
  - VTM-VRB-VRBC hardware and firmware
    - timing/FEB reduction

# SMT Hardware Studies

- **Sensors**
  - F-wedge noise
  - Bias studies
- **\* HV system**
  - Maintenance
  - Leakage current measurement (for integrated dose)

# SMT Online Software & Monitoring

- Calibration
  - \* PDAQ calibration of the pedestals
- Examine & Monitoring
  - \* Upgrade of the Examine to ROOT
  - SDAQ Monitoring
  - RecoCert
    - \* PDAQ examine
    - \* add plots to RecoCert
  - \* Track Based Monitoring
    - HDI participation in track formation
    - dE/dX calibration & monitoring
  - \* Plots for STT comparison

# SMT Online Software & Monitoring

- Radiation Monitoring
  - BLM
  - Fingers (commissioning)
- \* Shifter's GUIs
  - New LV GUI
  - several changes to GUIs to make them simpler to use for shifters
  - New GUI for mapping ( $\eta$ - $\phi$ , HDI, IB, HV)

# SMT Offline Software

- Tracking
  - \* Single Hit Resolution
  - Alignment
  - Correct description of the SMT mass