

# Main reasons for run inefficiency

- Detector issues:
  - increasing event size (PMD): run in a separate partition
  - HV, LV, ... instabilities (MCH)
    - Faulty HV crate+modules being replaced
    - DCS error (?)
  - perturbations (power glitches, etc), network issues (DAQ, HLT)
  - back pressure: interaction between DAQ and HLT
  - some detectors (EMCAL, ...) produce error if previous run ended abnormally
  - small hardware/DCS instabilities of TOF, TRD, TPC
- Beam instrumentation issues:
  - Beam pickup detectors (BPTX), used for trigger, underwent recent upgrades
  - high intensity beams were ‘funny’ (debunched), trigger affected
- Magnets: power perturbations, faulty hardware
- Human mistakes, miscommunication, lack of discipline
  - Improving by the day, but still far from perfect