21 October 2011

Working group: Flavour Physics and Symmetries (YK and TN)

Physics topics covered:

* Flavor Physics
  + CP violation and rare decays in B, D and K mesons
  + Charged lepton flavor violating processes: the m and t decays, m→e conversion
  + Lorentz structure in the m and t decays
  + Lepton universality
  + Lepton number violating processes
* Symmetry and Precision Experiments
  + Electric dipole moment (EDM) for electron, m, t, neutron, proton, deuteron
  + Anomalous magnetic dipole moment m g-2
  + CPT tests antiproton and other particles, K anti-K and B anti-B oscillations
  + Lorentz invariance tests
  + Baryon number conservation tests: neutron-antineutron oscillation

Facilities

* Currently possible not necessarily used for particle physics
  + B, D, and t  
    LHC, BEPC II
  + K  
    CERN, JPARC
  + muons  
    PSI, TRIUMF, J-PARC, FNAL, RAL
  + neutrons  
    PSI, ILL, Garching FRM II
* Future
  + B, D, and t  
    LHC, super B factories, Tau-Charm factories
  + Kaon  
    CERN, JPARC, Project-X@FNAL
  + muons  
    PSI, TRIUMF, J-PARC, Project-X@FNAL, (RAL?, CERN?, ESS?)
  + neutrons  
    PSI, ILL, Garching FRM II, (ESS?, Gatchina?)

How to interact community

* Invite some key persons to the meeting?
* Invite written contribution