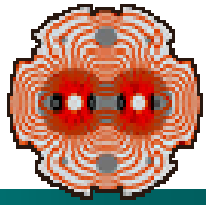
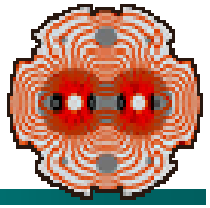


Low Level (LL)RF Workshop

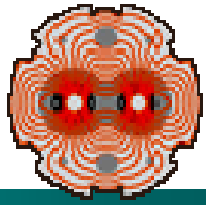
Steve Myers

Welcome



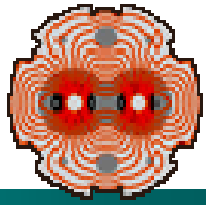
- Welcome to CERN for this 2nd Low Level RF workshop (LLRF05)
- ICFA “mini” workshop
- Chair Trevor Linnecar invited me to give a SHORT introduction

Progress since LLRF01



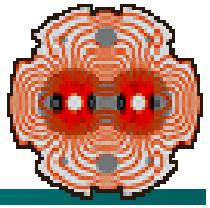
- 1st workshop at Jefferson Lab in 2001 concentrated on SC cavity control
- At the time of this first workshop digital designs of low-level systems were just starting
  - Lots of ideas but little application
- Now there is real experience from some labs. of digital low-level systems on operating machines
  - Result, we see that digital systems offer greater power and flexibility (will allow more complex beam gymnastics)
    - but have built-in overheads (development time and software)
- Now is a good time to share and profit from the gained experience

LLRF at CERN



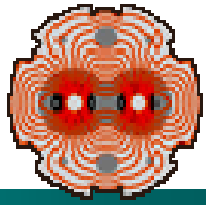
- All RF systems for all CERN accelerators are now in a single group (AB/RF)
  - Allows standardisation
  - Presently completing a digital low-level system for LEIR and building one for LHC
  - We will extend these digital techniques in the future to the other 7 machines/facilities currently at CERN
- LLRF05 is an opportunity for us to profit from your presence and experience to "referee" our present designs and plan for possible future machines
  - LHC upgrade, LINAC4, ILC, CLIC, SPL, Proton drivers, Neutrino factories etc. etc.

LLRF05



- 123 registered participants (originally around 80 were anticipated)
  - 18 from CERN
  - The remainder coming from 41 different institutions from all over the world
- 2nd workshop of this kind
  - Will there be a third?
  - Is it becoming a series?
- Important workshop for future machines and upgrades

Advice



- Maintain the series as a workshop i.e. do not allow the number of participants to grow too high

- Change the name of the activity

It is certainly NOT Low Level

Suggestion: High Energy Low Power

HELP!!