Laboratoire d'Annecy-le-Vieux
de Physique des Particules

LAPP plan

A.Jeremie

B.Bolzon, N.Geffroy

In2p3

Where LAPP is written on Tauchi-san's Task presentation

- Beam tuning
  - ~~Non-mover based BBA/EXT-KEK-LAPP/H/Okugi-san~~
  - ~~Mover-based BBA/EXT – SLAC,KEK,LAPP/H/ Janice Nelson~~
- Hardware commissioning
  - Magnet movers (beam steering test with mover) Janice
  - Cavity BPMs (calibration of position sensitivity with beam) Stew

Did not do anything but could be easier to participate if there is a beam schedule and not an R&D project submission method

- Alignment and stability
  - FD system and vibration/GM LAPP/Tokyo Univ. B.Bolzon
- ~~IP beam size tuning with IP BSM All G.White(M/H)~~

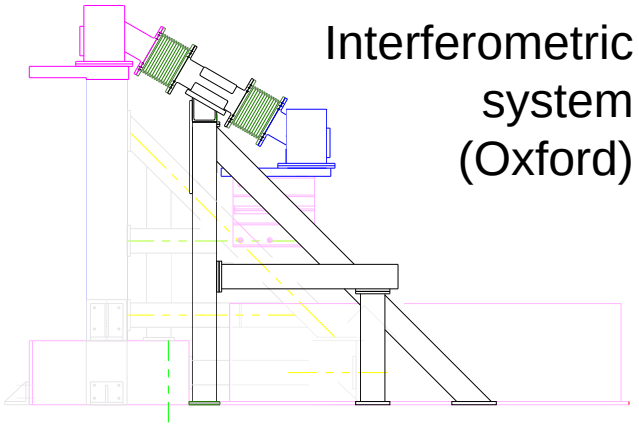
Did not do anything on this (almost)!
Lack of experience and no big momentum since we are a bit isolated
Will contact CERN colleagues (very near Annecy)

LAPP in PAC abstracts for future work

- **Linear collider test facility: ATF2 Final Doublet Active stabilization pertinence => see B.Bolzon's presentation later this afternoon**
- **Superconducting Magnets for a Final Focus Upgrade of ATF2 => see the TB presentation tomorrow**

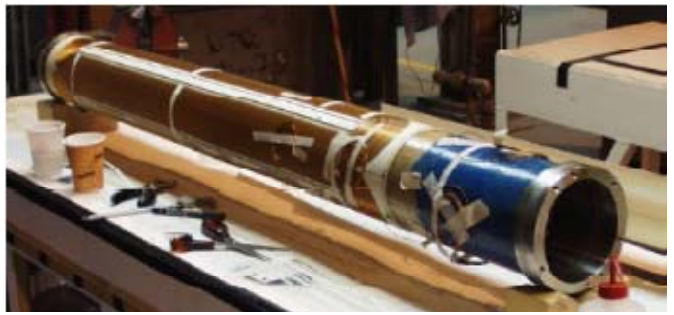
Near future on ATF2/KEK
Ongoing discussions

- upgrade the FD by new superconducting magnets constructed with the same technology as those of the International Linear Collider baseline FF magnets*.
- study superconducting magnet vibration stability in an accelerator environment.
- incorporate cryostat design features that facilitate monitoring of the cold mass movement via interferometric techniques.
- incorporate a useful active stabilization for ATF2 to use as a CLIC prototype => limiting factor: the 0.1Hz lower limit
- evaluate with a new ground motion generator the ideal response function that an actively stabilized FD system would need to have to improve on the present ATF2 system.



Interferometric system (Oxford)

Teams involved: CERN, KEK, LAPP, Oxford, LAL, SLAC, BNL



SC magnets : B.Parker (BNL)

Personnel

- **A.Jeremie Group leader**
- **B.Bolzon until end of 2009 vibration/active stabilisation evaluation**
- **N.Geffroy mechanics**
- **G.Gaillard/J.P.Baud machining/mechanics**
- **L.Brunetti feedback if active stabilisation is considered**
- **If there is a predefined schedule, we can join the commissioning work => for ex: if we know that there is a "mover" test, we can then join since we do not have enough experience to propose an R&D schedule ourselves**
- **LAPP is working on CLIC:**
  - Linac main beam active isolation under quad
  - FF stabilisation/compensation => with ATF2 FD active stabilisation evaluation with SC FD?