FCC@LPNHE meeting

- European strategy 'news' and timescale
- Meetings organization : A proposal
- Feedback from the January FCC workshop
- FCC-France feedback
- Manpower (Thesis, ITN)
- Budget
- Mailing lists
- AOB

Luc, Alain Luc Luc, Alain, Greg Greg Luc, Bogdan, Greg Luc Luc, Alain

- NB: Vava & Francesco cannot attend (LHCb meetings)
 - Extensive discussion done with Francesco*
- Also discussiions with Didier L. (CALICE) and Giovanni C. (ITk)

ESG 'News' & timescale

- Reminder IN2P3/CEA day 13/01
 - Support of H&EW precision (e+e-)+ High energy frontier (FCC-hh)
 - 'Recommend' FCC-INT (ee +hh) 1 keep eye on Asia (ee)
- ESG timescale
 - 20-25 January Drafting session -> No information out officially
 - 19-20 March CERN Council discussion on document
 - -> Expect some feedback in March
- What can be expected?
 - Recommendation that CERN focuses on new Circular Collider infrastructure (100km) -> TDR + start digging in 5-6 yrs (next ESPP update)
 - Hope explicit recommendation of FCC-ee (or FCC-INT or FCC-ee-hh-ep) as part of TDR
- Recommendation on R&D for High Field magnets

Meetings organization: Proposal

- Keep this meeting at a ~monthly basis
 - Try to get more people involved at least in discussions
- Proposal to have a LPNHE wide meeting in April (0.5 day)
 - April: Already some feedback from ESG available (March) and before FCC-France in May (see Greg later)
 - Present to the full Lab
 - The various machines and status,
 - The fields of physics where LPNHE has expertise & interests (H, Flavor,...)
 - The ongoing detector options where LPNHE has expertise & interests (Silicon for calorimetry and/or tracking)
 - Role of information + trigger potential involvements
 - Marco already informed

FCC@LPNHE-06/02/20

Feedback from FCC workshop (1)

- 13-17/01@CERN <u>https://indico.cern.ch/event/838435/</u>
 - Alain (ex-officio!!), Greg, Luc, at CERN
 - Extremely rich & lively: 250 registered, 115 presentations
- Sessions
 - Overview, incl. CERN DG & CepC presentations
 - Physics
 - Higgs & EW (x2), QCD (α_s , PDF) BSM, Flavour (LFV, τ , ν , top, c, b)
 - Detectors
 - General design, Calorimetry, Flavor tagging, Tracking, PID, Trigger & R/O
 - Theory (x2)
 - MC generators

Feedback from FCC workshop (2) Sessions (Cont'd)

- FCC-ee
 - MDI, Luminosity, Expts, Precision physics
- Software (incl. Tutorial https://hep-fcc.github.io/fcc-tutorials/)
- Final
 - Complementarity circular/linear (Patrick, Alain) https://arxiv.org/abs/1912.11871
 - Next steps (Alain)
- Personal feedback
 - Precision physics (ee) to be assessed quantitatively (eg full sim,..)
 - Big progress to assess hh discovery potential (EWPT, HHH)
 - Flavour physics well addressed ('neglected' at workshop in Nov)

- Detectors overall & content rather advanced

Manpower

- Keep looking at persons potentially interested at LPNHE
 - Baseline from Collider expts (ATLAS, LHCb) but not only
 - \cdot NB people are 100% busy with upgrades for HL-LHC
 - Other labs have the same issue but start also to get organized
 - April LPNHE-wide meeting can attract more people
- PhD student?
 - Already proposal ATLAS prospects HH to bb $\gamma\gamma$ Greg
 - Idea to be discussed
 - Thesis with ATLAS part + part oriented to FCC-ee physics (eg H selfcoupling with 1H production, or precision EW)?
 - Luc+Bogdan co-supervisors?
- Training Networks (ITN) Call: H2020-MSCA-ITN-2020 Gree

Tentative budget for 2020 (cont'd)

- Agreed by Marco to have FCC dedicated line
- Inputs
 - -FCC yearly Workshop at CERN: Total 800€
 - -FCC yearly Week (This year in Paris, November): Total 500€ -Typical 3 days discussion/meeting at CERN: Total 380€
- Needs
 - Workshop x2p / Week x3p / Discussion x10 p.xmonth
- Output
 - 7k€ looks reasonable
 - Can evolve: Extra expense?, FCC week maintained?, extra budget (FCC-France)?

Mailing lists

- Regular meetings every 1-2 months
 - FCC-ee Physics (P. Azzi)
 - fcc-ee-DesignStudy@cern.ch
 - FCC-ee Detector Design Meeting WG11
 - fcc-ee-DesignStudy@cern.h
 - FCC-Software devt for FCC expts
 - fcc-experiments-sw-dev@cern.ch
- More meetins & mailing lists at
 - <u>Home » Projects » FCC</u>
 - <u>https://indico.cern.ch/category/5153/</u>

Please subscribe!

(G. Ganis, C. Helsens)

(M. Dam)