



SHiP

13 October 2017

**Summary of the discussion at the Journée SHiP/Physique du secteur caché
(LPNHE Univ. Pierre et Marie Curie Paris-6, 11 October 2017)**

1. Interest in SHiP expressed by French groups.

- Micromegas for the Target Tracker (M. Titov, Irfu)
- Electronics:
 - Overall electronics (D. Breton, J. Maalmi, P. Robbe, LAL)
 - Specifically for SBT and Spectrometer Timing detector (LAL)
 - SAMPIC chip development for Spectrometer Timing detector and ECAL
- Calorimetry (J. Chauveau, J.-M. Levy, F. Vannucci, LPNHE)

2. Opportunities for French groups to join SHiP.

- BDF WG activity. Critical technical studies under PBC.
- Obtention of beam time opportunities outside CERN during 2019-2020.
- Construction or use of a cosmic lab.
- Online/DAQ.
- Offline computing (DIRAC).

3. Theory activities: phenomenology.

- One of the objectives of the GdR-InF WG is to establish and enforce connections between theory and experiments, SHiP fits well in this activity. The next meeting where future experiments will be discussed is at CERN. The GdR-InF meetings have minutes and a scientific production. It is an ideal place to make SHiP visible to the French community.

4. Further use of the SHiP facility.

- The currently foreseen beam optics would allow a $\tau \rightarrow 3\mu$ detector with a thin target in front of the SHiP target. Technology from the LHC-Upgrades can be used. Some French groups may be interested to study this.

5. Seminars.

- V. Balagura will follow up the organisation of a seminar at Ecole Polytechnique.
- Strassbourg should be followed up.

6. Synergy with other HS projects

- HPS. There is a group at IPN Orsay who is working on this experiment.
- Codexb. V. Gligorov proposes looking for exotic Higgs decays at LHCb. There is space and the infrastructure (integration with the LHCb trigger) is available for 'free'. SHiP should follow and encourage exchange of ideas.

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