

# PROPOSAL FOR SHiP PAPERS

**Walter**

# Rationale

**With SHiP we have some difficulties compared to other experiments in our labs:**

- every year we have to fight for funding (LHC...)**
- not approved yet**
- long time before experiment starts**
- difficult to find students and post-docs..**
- no publications for experimentalists (bad for experiment evaluation and for career, it is country dependent but should not be neglected)**

# Rationale

**What can we do to improve NOW the situation?**

**PUBLICATIONS in JOURNALS!!!!**

**But, we cannot publish things that already published such as the PP**

**However, the TP IS UNPUBLISHED (we should have done it yes but as a matter of fact, we didn't): it is public but not published**

**So in principle we could publish everything that is described in the TP and not contained in the PP, updating the material to more recent studies.**

# SIGNATURE POLICY

**We would like to start from a “light” proposal and keep it flexible**

**For papers of general SHIP interest (TP-based studies) all CN should sign.**

**Either have the main authors of the study first or alphabetic order and writing accompanying internal notes (like SHiP-PAPER-001) —> the feeling of the CRB is that we should see how it goes when the first publication arrives**

**Signature policy of test beam results publications will be upon discretion of authors (some people requested it)**

**For papers done in collaboration with theorists who are not members of SHiP a special procedure should be setup (by e.g the SP and PC) to agree on tools and signatures and again there could be a shorter list if requested**

## **MOST IMPORTANT**

**It is FORBIDDEN to published with a small list of authors AND writing “on behalf of SHIP” or “and the SHIP collaboration”**

**either you put everybody**

**or just the names of authors**

**Initial set of papers that could be signed  
by the whole CN (with some contact-  
author names)**

**SHiP facility —> Richard, Goddard**

**SHiP Computing and Simulation —> Thomas**

**SHiP DAQ —> Hans**

**Muon shield —> Hans**

**NP in tau neutrino scattering —> Walter, Behzad**

**Dark Matter sensitivity —> Andrei, Giovanni**

# FINANCIAL MATTERS

**Eric has checked that since we have CERN authors we don't have to pay for publication**

**The list of authors is kept updated by Eric**

# Practical proposal

**CERN repository or Dropbox folder where all the directory files with the relevant files are located.**

**If needed I offer to poll the journals for who is wishing to publish this kind of papers.**

**We could provide a skeleton section like “SHIP experiment” that all papers could use. Who will write this?**

**When a paper is ready it will be circulated (by me) to the whole collaboration for comments as in all collaborations**



# The first one

Sensitivity of the proposed SHiP beam dump  
experiment at CERN to lepton universality violations in  
 $\nu_\tau$  scattering

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## Abstract

We discuss here the sensitivity of the proposed SHiP beam dump experiment at CERN to lepton universality violations in  $\nu_\tau$  scattering. The SHiP experiment includes a detector designed to detect  $\nu_\tau$  scattering, inheriting the design from the OPERA experiment at LNGS. The experiment aims at collecting a large statistics of  $\nu_\tau$  interaction events, about 200 times the present one. Differential cross section measurements would allow to constrain models of scalar tensor interactions

*Keywords:*

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## About conferences

**As Richard said detector design is updated continuously and we need to present things coherently.**

**In the conf page I will create a repository for a set of plots that need to be used for presentations (and given to the other people presenting SHiP)**

**example: latest frustum decay volume design**