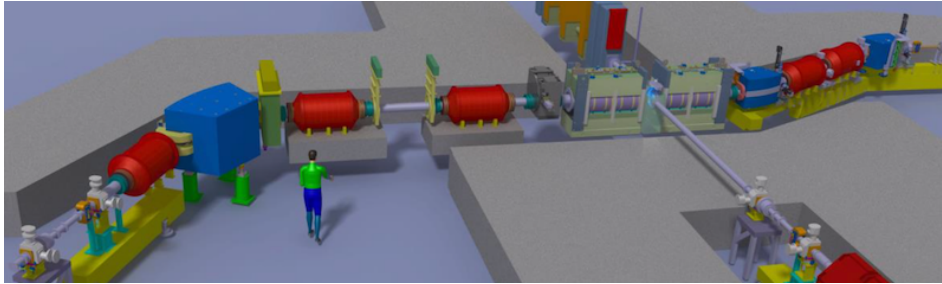


# HIMB Physics Case Workshop

Tuesday, 6 April 2021 - Friday, 9 April 2021

Zoom



## Book of Abstracts



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## **Mu3e Phase II - Design and Resolution Studies**

**Corresponding Author:** [schoning@mail.desy.de](mailto:schoning@mail.desy.de)

**Session 1 / 2**

## **Mu3e Phase II - Background Studies and High Rates**

**Corresponding Author:** [niberger@uni-mainz.de](mailto:niberger@uni-mainz.de)

**Session 1 / 3**

## **muCool 03**

**Corresponding Author:** [aldo.antognini@psi.ch](mailto:aldo.antognini@psi.ch)

**Topic:**

**Abstract Type:**

**Session 1 / 4**

## **muSR I 04: Future of muSR with HIMB – New techniques and new opportunities**

**Corresponding Author:** [zaher.salman@psi.ch](mailto:zaher.salman@psi.ch)

**Topic:**

**Abstract Type:**

**Session 1 / 5**

## **1A Mu3e Parallel**

**Corresponding Author:** [schoning@mail.desy.de](mailto:schoning@mail.desy.de)

Google doc for discussion:

<https://docs.google.com/document/d/15KdyNW3j4UO73czCDi5XVqLFbcTy5m7lzf0mDkjKTY/edit?usp=sharing>

**Topic:**

**Abstract Type:**

**Session 1 / 6**

## **1B muCool Parallel**

**Corresponding Author:** aldo.antognini@psi.ch

**Topic:**

**Abstract Type:**

**Session 1 / 7**

## **1C muSR I Parallel**

**Corresponding Author:** thomas.prokscha@psi.ch

**Topic:**

**Abstract Type:**

**Session 2 / 8**

## **MEG General introduction**

**Corresponding Authors:** angela.papa@psi.ch, rengaf81@gmail.com

**Session 2 / 9**

## **MEG with Conversion Photon Spectrometer**

**Corresponding Author:** wataru.ootani@psi.ch

**Topic:**

**Abstract Type:**

**Session 2 / 10**

## **moments 07**

**Corresponding Author:** philipp.schmidt-wellenburg@psi.ch

**Topic:**

**Abstract Type:**

Session 2 / 11

## **muSR II 08: High Intensity Muons for superconductors, nano-magnets and quantum entangled states**

**Corresponding Author:** roberto.de.renzi.0@gmail.com

**Topic:**

**Abstract Type:**

Session 2 / 12

## **2A MEG Parallel**

**Corresponding Author:** angela.papa@psi.ch

**Topic:**

**Abstract Type:**

Session 2 / 13

## **2B moments Parallel**

**Corresponding Author:** philipp.schmidt-wellenburg@psi.ch

- “Theory view on lepton moments, (non)-universality and CPX” by G. Hiller 15’
- discussion with possible short presentations
- “J-PARC g-2/EDM experiment”, by T. Mibe 15’
- discussion with possible short presentations

**Topic:**

**Abstract Type:**

Session 2 / 14

## **2C muSR II Parallel**

**Corresponding Author:** zaher.salman@psi.ch

**Topic:**

**Abstract Type:**

**Session 3 / 15**

## **muSR III 09: Using hydrostatic pressure and uniaxial strain to uncover, control and manipulate novel phases in quantum materials**

**Corresponding Author:** zurab.guguchia@psi.ch

**Topic:**

**Abstract Type:**

**Session 3 / 16**

## **Next generation Muonium experiments and the impact of HiMB**

**Corresponding Authors:** asoter@ethz.ch, crivelli@phys.ethz.ch

**Topic:**

**Abstract Type:**

**Session 3 / 17**

## **Pool of further ideas**

**Corresponding Author:** adrian.signer@psi.ch

**Topic:**

**Abstract Type:**

**Session 3 / 18**

## **3B muonium Parallel**

**Corresponding Authors:** anna.soter@psi.ch, crivelli@phys.ethz.ch, yotam.soreq@cern.ch, bohayon@ethz.ch, k.h.k.jungmann@rug.nl, nesvizhevsky@ill.eu, dylan.yost@colostate.edu

**Topic:**

**Abstract Type:**

**Session 3 / 19**



## **3A muSR III parallel**

**Corresponding Author:** hubertus.luetkens@psi.ch

**Topic:**

**Abstract Type:**

**Session 3 / 20**

## **3C pool Parallel**

**Corresponding Authors:** adrian.signer@psi.ch, angela.papa@psi.ch

**Topic:**

**Abstract Type:**

**Session 4 / 21**

## **Update cases 01-06**

15' each

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## **Update cases 07-10 & pool**

15' each

**Session 4 / 23**

## **Status of HIMB**

**Corresponding Author:** a.knecht@psi.ch

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## **Fast Monolithic Pixel Detectors**

**Corresponding Author:** ivan.peric@kit.edu

**Session 2 / 28**

## **MEG Tracking: Gaseous Detectors**

**Corresponding Author:** [rengaf81@gmail.com](mailto:rengaf81@gmail.com)

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## **MEG Tracking: Silicon Detectors**

**Corresponding Author:** [schoning@mail.desy.de](mailto:schoning@mail.desy.de)

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## **Welcome**

**Corresponding Authors:** [adrian.signer@psi.ch](mailto:adrian.signer@psi.ch), [klaus.kirch@psi.ch](mailto:klaus.kirch@psi.ch)