

# **8th HERD Workshop**

## **Report of Contributions**

Contribution ID: 0

Type: **not specified**

## Welcome speech

*Monday, 16 December 2019 09:00 (10 minutes)*

**Session Classification:** Welcome & general progress

Contribution ID: 1

Type: **not specified**

## General progress of HERD

*Monday, 16 December 2019 09:10 (20 minutes)*

**Presenter:** ZHANG, Shuang-Nan

**Session Classification:** Welcome & general progress

Contribution ID: 2

Type: **not specified**

## Payload progress and update

*Monday, 16 December 2019 09:30 (15 minutes)*

**Presenter:** Dr DONG, Yongwei (Center for particle astrophysics, Institute of High Energy Physics, CAS)

**Session Classification:** Welcome & general progress

Contribution ID: 3

Type: **not specified**

## TeV gamma ray halo and cosmic electrons spectrum

*Monday, 16 December 2019 10:10 (25 minutes)*

**Presenter:** Dr BI, Xiaojun (IHEP, CAS)

**Session Classification:** Welcome & general progress

Contribution ID: 4

Type: **not specified**

## **Recent advances in galactic CR observations: the importance of the HERD measurements**

*Monday, 16 December 2019 09:45 (25 minutes)*

**Presenters:** Prof. DE MITRI, Ivan; Prof. ADRIANI, Oscar (University of Florence)

**Session Classification:** Welcome & general progress

Contribution ID: 5

Type: **not specified**

## CALO beam test results & update

*Monday, 16 December 2019 10:55 (20 minutes)*

**Presenter:** QUAN ZHENG, Zheng (IHEP)

**Session Classification:** CALO progress

Contribution ID: 6

Type: **not specified**

## High performance sCMOS platform

*Monday, 16 December 2019 11:30 (15 minutes)*

**Presenter:** 高, 佳锐 (中国科学院西安光学精密机械研究所)

**Session Classification:** CALO progress



Contribution ID: 7

Type: **not specified**

## CALO dual readout prototype

*Monday, 16 December 2019 12:00 (20 minutes)*

**Presenters:** LORENZO, Pacini (Florence); Mr 刘, 鑫 (高能所)

**Session Classification:** CALO progress

Contribution ID: 8

Type: **not specified**

## TRD progress and beam test results

**Presenter:** Mr LIU, Hongbang (GXU)

Contribution ID: 9

Type: **not specified**

## PSD bar prototype at IHEP

*Tuesday, 17 December 2019 09:00 (20 minutes)*

**Presenter:** Dr WANG, Zhigang (IHEP)

**Session Classification:** PSD progress

Contribution ID: 10

Type: **not specified**

## **GEANT4-based simulation of light production/propagation/detection in bar shaped PSD with SiPM readout**

*Tuesday, 17 December 2019 09:20 (15 minutes)*

**Presenter:** ALEMANNNO, Francesca (G)

**Session Classification:** PSD progress

Contribution ID: 11

Type: **not specified**

## **First test measurements on bar-shaped PSD with SiPM readout at GSSI-LNGS**

*Tuesday, 17 December 2019 09:35 (20 minutes)*

**Presenter:** KYRATZIS, Dimitrios (G)

**Session Classification:** PSD progress

Contribution ID: 12

Type: **not specified**

## CNAO facility for HERD beam test

*Tuesday, 17 December 2019 09:55 (15 minutes)*

**Presenter:** CATTANEO, Paolo Walter (I)

**Session Classification:** PSD progress

Contribution ID: 13

Type: **not specified**

## **Preliminary results on PSD tile beam test @CNAO**

*Tuesday, 17 December 2019 10:10 (15 minutes)*

**Presenter:** RAPPOLDI, Andrea (I)

**Session Classification:** PSD progress

Contribution ID: 14

Type: **not specified**

## Status on the PSD activity in Lecce

*Tuesday, 17 December 2019 10:45 (15 minutes)*

**Presenter:** Dr MARSELLA, Giovanni (Università del Salento and INFN)

**Session Classification:** PSD progress



Contribution ID: 15

Type: **not specified**

## Test results on PSD tile prototype in Bari

*Tuesday, 17 December 2019 11:00 (15 minutes)*

**Presenter:** ALTOMARE, Corrado (U)

**Session Classification:** PSD progress

Contribution ID: 16

Type: **not specified**

## **A full and customizable simulation of a scintillation tile equipped with SiPMs for HERD PSD**

*Tuesday, 17 December 2019 11:15 (20 minutes)*

**Presenter:** SERINI, Davide (I)

**Session Classification:** PSD progress

Contribution ID: 17

Type: **not specified**

## **Preliminary studies on the effect of backslash in photon identification**

**Presenter:** Mr HU, 鹏 (高能所)

Contribution ID: **18**

Type: **not specified**

## **Proposal for HERD improved design**

*Monday, 16 December 2019 14:00 (20 minutes)*

**Presenters:** AMBROSI, Giovanni (INFN-PG); Prof. ADRIANI, Oscar (University of Florence)

**Session Classification:** Improvement design

Contribution ID: **19**

Type: **not specified**

## **STK beam result & SCD idea**

*Monday, 16 December 2019 14:40 (20 minutes)*

**Presenter:** PENG, Wenxi (IHEP)

**Session Classification:** Improvement design

Contribution ID: **20**

Type: **not specified**

## **FIT photon performances**

*Monday, 16 December 2019 15:00 (20 minutes)*

**Presenter:** WU, Xin (University of Geneva)

**Session Classification:** Improvement design

Contribution ID: 21

Type: **not specified**

## Strip SCD performances

*Monday, 16 December 2019 14:20 (20 minutes)*

**Presenter:** OLIVA, A. (CIEMAT)

**Session Classification:** Improvement design

Contribution ID: 22

Type: **not specified**

## **FIT beam test results**

*Monday, 16 December 2019 16:40 (20 minutes)*

**Presenter:** AZZARELLO, Philipp (U)

**Session Classification:** TK&TRD progress



Contribution ID: 23

Type: **not specified**

## Status report on FIT design and integration

*Monday, 16 December 2019 17:00 (20 minutes)*

**Presenter:** CADOUX, Frank (U)

**Session Classification:** TK&TRD progress

Contribution ID: 24

Type: **not specified**

## HERDSoftware update

**Presenter:** Dr MORI, Nicola (INFN Florence)

Contribution ID: 25

Type: **not specified**

## Trigger studies

**Presenter:** CASAUS, Jorge (CIEMAT)

Contribution ID: 26

Type: **not specified**

## Acceptance measurement with HERDSoftware

**Presenter:** PACINI, Lorenzo (I)

Contribution ID: 27

Type: **not specified**

## Simulation on fragmentation for high energy CR

*Monday, 16 December 2019 13:40 (20 minutes)*

**Presenter:** QUAN ZHENG, Zheng (IHEP)

**Session Classification:** Improvement design

Contribution ID: 28

Type: **not specified**

## Effect of nuclear interactions for the charge measurement

*Monday, 16 December 2019 13:20 (20 minutes)*

**Presenter:** BOTTAL, sergio (I)

**Session Classification:** Improvement design

Contribution ID: 29

Type: **not specified**

## **FIT module simulation**

**Presenter:** 王, 俊静 (高能所)

Contribution ID: **30**

Type: **not specified**

**SDU**



Contribution ID: 31

Type: **not specified**

## Time detector in HERD

*Monday, 16 December 2019 15:20 (20 minutes)*

**Presenter:** DURANTI, Matteo (I)

**Session Classification:** Improvement design

Contribution ID: 32

Type: **not specified**

## Discussion on payload configuration

*Monday, 16 December 2019 15:40 (40 minutes)*

**Session Classification:** Improvement design

Contribution ID: 33

Type: **not specified**

## TRD progress

*Monday, 16 December 2019 17:20 (20 minutes)*

**Presenter:** Mr LIU, Hongbang (GXU)

**Session Classification:** TK&TRD progress

Contribution ID: 34

Type: **not specified**

## Discussion on MC & SOFTWARE

Contribution ID: 35

Type: **not specified**

## Discussion on PSD

*Tuesday, 17 December 2019 11:35 (25 minutes)*

**Session Classification:** PSD progress

Contribution ID: 36

Type: **not specified**

## HERDSOFTWARE framework update

*Tuesday, 17 December 2019 13:00 (20 minutes)*

**Presenter:** Dr MORI, Nicola (INFN Florence)

**Session Classification:** MC & SOFTWARE

Contribution ID: 37

Type: **not specified**

## Acceptance measurement with HERDSoftware

*Tuesday, 17 December 2019 13:20 (20 minutes)*

**Presenter:** PACINI, Lorenzo (I)

**Session Classification:** MC & SOFTWARE

Contribution ID: **38**

Type: **not specified**

## Trigger studies

*Tuesday, 17 December 2019 13:40 (20 minutes)*

**Presenter:** CASAUS, Jorge (CIEMAT)

**Session Classification:** MC & SOFTWARE



Contribution ID: 39

Type: **not specified**

## **FIT module simulation**

*Tuesday, 17 December 2019 14:00 (20 minutes)*

**Presenter:** 王, 俊静 (高能所)

**Session Classification:** MC & SOFTWARE

Contribution ID: 40

Type: **not specified**

## **Preliminary studies on the effect of backslash in photon identification**

*Tuesday, 17 December 2019 14:20 (20 minutes)*

**Presenter:** Mr HU, 鹏 (高能所)

**Session Classification:** MC & SOFTWARE

Contribution ID: 41

Type: **not specified**

## Discussion on MC & SOFTWARE

Contribution ID: 42

Type: **not specified**

## **Performance of image intensifier for IsCMOS readout system of HERD**

*Monday, 16 December 2019 11:15 (15 minutes)*

**Presenter:** Dr WANG, Bo (XIOPM)

**Session Classification:** CALO progress

Contribution ID: 43

Type: **not specified**

## **CALO Photodiode trigger and readout system**

*Monday, 16 December 2019 11:45 (15 minutes)*

**Presenter:** MARIN, JESUS (CIEMAT)

**Session Classification:** CALO progress

Contribution ID: 44

Type: **not specified**

## Introduction to the software system based on SNIPEr

*Tuesday, 17 December 2019 16:00 (20 minutes)*

**Presenter:** Prof. HUANG, Xingtao (Shandong University)

**Session Classification:** Discussion on MC & SOFTWARE

Contribution ID: 45

Type: **not specified**

## Direct Detection of TeV-PeV Cosmic Rays in Space

*Tuesday, 17 December 2019 16:20 (20 minutes)*

**Primary author:** TYKHONOV, Andrii (U)

**Presenter:** TYKHONOV, Andrii (U)

**Session Classification:** Discussion on MC & SOFTWARE