

# **CALICE Collaboration Meeting at McGill University**



## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Registration

*Wednesday, March 4, 2020 8:00 AM (1 hour)*

Contribution ID: 2

Type: **not specified**

## Closing of Meeting

*Friday, March 6, 2020 9:00 PM (1 hour)*

Contribution ID: 3

Type: **not specified**

## **Photon-to-Digital Converters for precise timestamping and/or large area noble liquid experiments**

*Wednesday, March 4, 2020 5:00 PM (30 minutes)*

**Presenter:** Dr PRATTE, Jean-François (Sherbrooke University)

**Session Classification:** Other Applications

Contribution ID: 4

Type: **not specified**

## **REDTOP/ADRIANO2 - CALICE related issues**

*Wednesday, March 4, 2020 5:30 PM (30 minutes)*

**Presenter:** GATTO, Corrado (INFN)

**Session Classification:** Other Applications

Contribution ID: 5

Type: **not specified**

## **SiWECAL: Latest developments and TB2020 preparations**

*Thursday, March 5, 2020 9:00 AM (30 minutes)*

(25+5 min)

**Presenter:** POESCHL, Roman (Université Paris-Saclay (FR))

**Session Classification:** ECAL

Contribution ID: 6

Type: **not specified**

## SiWECAL: Retriggers studies

*Thursday, March 5, 2020 9:45 AM (20 minutes)*

(15+5 min)

**Primary author:** KATO, Yu (University of Tokyo)

**Presenters:** BOUDRY, Vincent (LLR); KATO, Yu (University of Tokyo)

**Session Classification:** ECAL

Contribution ID: 7

Type: **not specified**

## **SiWECAL APD/PSD: Results from the test beam**

*Thursday, March 5, 2020 10:05 AM (25 minutes)*

(20+5 min)

**Presenters:** SUEHARA, Taikan (Kyushu University); OOTANI, Wataru (ICEPP, Univ. of Tokyo)

**Session Classification:** ECAL



Contribution ID: 8

Type: **not specified**

## Status of the CEPC sci-ECAL R&D

*Wednesday, March 4, 2020 1:30 PM (25 minutes)*

(20+5min)

**Presenters:** LIU, Jianbei (University of Science and Technology of China); TAKESHITA, Tohru

**Session Classification:** ECAL

Contribution ID: 9

Type: **not specified**

## Status of the Sc-ECAL at Shinshu

*Wednesday, March 4, 2020 1:55 PM (25 minutes)*

(20+5 min)

**Presenter:** TAKESHITA, Tohru

**Session Classification:** ECAL

Contribution ID: **10**

Type: **not specified**

## **Double SiPM readout layers for Sc-ECAL prototype**

*Wednesday, March 4, 2020 2:20 PM (25 minutes)*

(20+5 min)

**Presenter:** OOTANI, Wataru (ICEPP, Univ. of Tokyo)

**Session Classification:** ECAL

Contribution ID: 11

Type: **not specified**

## Status of AHCAL analyses at DESY

*Thursday, March 5, 2020 4:00 PM (40 minutes)*

**Presenter:** KRUEGER, Katja (DESY)

**Session Classification:** Analysis

Contribution ID: 12

Type: **not specified**

## **Simulation studies of material and scintillator non-uniformities**

*Thursday, March 5, 2020 4:40 PM (20 minutes)*

**Presenters:** EMBERGER, Lorenz (Max-Planck-Institute for Physics); EMBERGER, Lorenz Konrad (Max-Planck-Institut für Physik (DE))

**Session Classification:** Analysis

Contribution ID: 13

Type: **not specified**

## Time calibration & reconstruction in the AHCAL

*Thursday, March 5, 2020 5:00 PM (20 minutes)*

**Presenters:** EMBERGER, Lorenz (Max-Planck-Institute for Physics); EMBERGER, Lorenz Konrad (Max-Planck-Institut für Physik (DE))

**Session Classification:** Analysis

Contribution ID: 14

Type: **not specified**

## **Energy reconstruction using timing and shower shape with software compensation and neural networks**

*Friday, March 6, 2020 9:00 AM (20 minutes)*

**Presenter:** GRAF, Christian (Max Planck Institute for Physics)

**Session Classification:** Analysis

Contribution ID: 15

Type: **not specified**

## Welcome from the Chair of the McGill Department of Physics

*Wednesday, March 4, 2020 9:00 AM (10 minutes)*

**Presenter:** Prof. JEON, Sangyong

**Session Classification:** Opening



Contribution ID: 16

Type: **not specified**

## **Welcome from local organisers and organisational matters**

*Wednesday, March 4, 2020 9:10 AM (15 minutes)*

**Presenters:** CORRIVEAU, Francois; CORRIVEAU, Francois (McGill University, (CA))

**Session Classification:** Opening

Contribution ID: 17

Type: **not specified**

## Spokespersons Welcome

*Wednesday, March 4, 2020 9:25 AM (20 minutes)*

**Presenter:** POESCHL, Roman (Université Paris-Saclay (FR))

**Session Classification:** Opening

Contribution ID: **18**

Type: **not specified**

## Report from Technical Board

*Wednesday, March 4, 2020 9:45 AM (15 minutes)*

**Presenters:** KRUEGER, Katja (DESY); KRUEGER, Katja (Universität Heidelberg)

**Session Classification:** Opening

Contribution ID: 19

Type: **not specified**

## Report from Speakers Bureau

*Wednesday, March 4, 2020 10:00 AM (15 minutes)*

**Presenters:** CORRIVEAU, Francois (McGill University, (CA)); CORRIVEAU, Francois

**Session Classification:** Opening

Contribution ID: 20

Type: **not specified**

## The REDTOP experiment: Rare Eta Decays to Explore new Physics

*Wednesday, March 4, 2020 3:30 PM (1h 30m)*

**Abstract:** The integrated  $\eta$  and  $\eta'$  meson samples collected in earlier experiments have been about  $\sim 10^9$  events, limiting considerably the search for such rare decays. A new experiment, REDTOP, is being proposed, to Fermilab and CERN, with the goal of collecting more than  $10^{13}$   $\eta$ /year ( $10^{11}$   $\eta'$ /year) for studying of rare processes. Such statistics are sufficient for investigating symmetry violations, and for searches of new particles BSM. Recent studies have indicated that REDTOP has very good sensitivity to processes that couple to the Standard Model through three portals: the vector, the scalar and the axion portal.

REDTOP is aiming at running at Fermilab with a staged approach. In Phase-I, the experiment will be located in the APS hall and receive protons at 1.8-3.5GeV from the Delivery Ring. In Phase-II, an upgraded version of the detector will be proposed for running at PIP-II, where the  $\eta$  mesons will be produced with tagging. The kinematics will be fully closed and the experiment will be sensitive to long-lived particles by measuring the missing 4-momentum of the event. The physics program, the accelerator systems and the detector for REDTOP will be discussed during the presentation.

**Presenter:** GATTO, Corrado (INFN / Northern Illinois University)

**Session Classification:** McGill Seminar as part of the CALICE Meeting (please note that department people will join us)

Contribution ID: 21

Type: **not specified**

## **Electromagnetic shower shapes recorded with the Si-W-ECAL**

**Presenter:** BOUDRY, Vincent (LLR)

**Session Classification:** Analysis

Contribution ID: 22

Type: **not specified**

## **Cocktail at the McGill Faculty Club**

*Thursday, March 5, 2020 7:00 PM (30 minutes)*

**Session Classification:** Cocktail and Dinner at the McGill Faculty Club

Contribution ID: 23

Type: **not specified**

## **Dinner at the McGill Faculty Club**

*Thursday, March 5, 2020 7:30 PM (2h 30m)*

**Session Classification:** Cocktail and Dinner at the McGill Faculty Club



Contribution ID: 24

Type: **not specified**

## Visits to the Rutherford and McPherson Museums

*Friday, March 6, 2020 11:00 AM (1 hour)*

**Presenter:** CURATOR PROF. JEAN BARRETTE

**Session Classification:** Visits of sTGC Lab and Museums in the Department of Physics

Contribution ID: 25

Type: **not specified**

## Visits to the McPherson Museum

**Session Classification:** Visits of sTGC Lab and Museums in the Department of Physics

Contribution ID: 26

Type: **not specified**

## Visits to the ATLAS Thin Gap Chamber Lab

*Friday, March 6, 2020 10:30 AM (30 minutes)*

**Presenter:** LAB MANAGER DR. TONY KWAN

**Session Classification:** Visits of sTGC Lab and Museums in the Department of Physics

Contribution ID: 27

Type: **not specified**

## SiW ECAL Compact Digital Readout Electronics

*Wednesday, March 4, 2020 11:00 AM (20 minutes)*

**Presenter:** POESCHL, Roman (Université Paris-Saclay (FR))

**Session Classification:** Electronics and DAQ

Contribution ID: 28

Type: **not specified**

## Tileboard and HGCROC tests

*Wednesday, March 4, 2020 11:20 AM (20 minutes)*

**Presenters:** KRUEGER, Katja (DESY); REINECKE, Mathias (DESY)

**Session Classification:** Electronics and DAQ

Contribution ID: 29

Type: **not specified**

## **HGCROC2 measurements and future CALICE chips at OMEGA**

*Wednesday, March 4, 2020 11:40 AM (20 minutes)*

**Presenter:** DE LA TAILLE, Christophe (OMEGA (FR))

**Session Classification:** Electronics and DAQ

Contribution ID: **30**

Type: **not specified**

## **Electromagnetic shower shapes recorded with the Si-W-ECAL**

*Thursday, March 5, 2020 3:10 PM (20 minutes)*

**Presenter:** BOUDRY, Vincent (LLR)

**Session Classification:** Analysis

Contribution ID: **31**

Type: **not specified**

## **Report from ICFA/LCB Meeting**

*Thursday, March 5, 2020 2:30 PM (20 minutes)*

**Presenters:** WHITE, Andrew (University of Texas at Arlington (US)); WHITE, Andy

**Session Classification:** ICFA/LCB Meeting



Contribution ID: **32**

Type: **not specified**

## **Discussion**

*Thursday, March 5, 2020 2:50 PM (20 minutes)*

**Session Classification:** ICFA/LCB Meeting

Contribution ID: **33**

Type: **not specified**

## **AHCAL overview**

*Thursday, March 5, 2020 11:00 AM (40 minutes)*

**Presenter:** KRUEGER, Katja (DESY)

**Session Classification:** AHCAL

Contribution ID: 34

Type: **not specified**

## **Studies of Scintillation tiles and new MPPCs**

*Thursday, March 5, 2020 11:40 AM (20 minutes)*

**Presenters:** EIGEN, Gerald (University of Bergen (NO)); EIGEN, Gerald (University of Bergen)

**Session Classification:** AHCAL

Contribution ID: 35

Type: **not specified**

## Report on LLR activities

*Thursday, March 5, 2020 9:30 AM (15 minutes)*

10+5 min

**Presenters:** BOUDRY, Vincent (LLR); KATO, Yu (University of Tokyo)

**Session Classification:** ECAL

Contribution ID: **36**

Type: **not specified**

## **SDHCAL Overview**

*Thursday, March 5, 2020 2:00 PM (25 minutes)*

**Presenter:** FOUZ IGLESIAS, Maria (Centro de Investigaciones Energéticas Medioambientales y Tecno)

**Session Classification:** SDHCAL

Contribution ID: 37

Type: **not specified**

## Report from Institution Board

*Friday, March 6, 2020 9:30 AM (10 minutes)*

**Presenters:** LAKTINEH, Imad (Centre National de la Recherche Scientifique (FR)); LAKTINEH, Laktineh (Universite Claude Bernard-Lyon I (FR)); POESCHL, Roman (Université Paris-Saclay (FR)); BOUDRY, Vincent (LLR); LAKTINEH, imad (ipnl); LAKTINEH, imad

**Session Classification:** Closing of the Meeting

Contribution ID: **38**

Type: **not specified**

## Farewell

*Friday, March 6, 2020 9:40 AM (10 minutes)*

**Presenter:** POESCHL, Roman (Université Paris-Saclay (FR))

**Session Classification:** Closing of the Meeting