

SDHCAL activities dashboard

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IP2I (previously IPN) Lyon

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Ongoing activities

Test beam analysis

all TB

- Uniformity (Bing+SJTU)
- Low Energy hadrons (Bing+SJTU)
- Uses of BDT (Bing+SJTU)

09/2018 only

- SiWECAL+SDHCAL (Hector+CIEMAT : (done ?))
- Tricot electronics (GG, on hold)

2015 only

- Analysis with rotated device (on hold)

Ongoing activities

PFA

- ArborPFA → APRIL (Bo, → GG)
- Rand Index (GG)
- PFA with timing (Imad starting)

Digitisation

Incorporate GRPC response modeling to digitiser, (Clermont+Lyon).

ILD/CEPC Analysis

- CIEMAT
- $e^+e^- \rightarrow \gamma\gamma VV$ (Bing)

Hardware

- 2m² GRPC+HR3 ASU+ new DIF (Lyon+ CIEMAT) **News at last CALICE meeting**
- Timing electronics (CMS muon)
- Cooling for CEPC (SJTU)
- SJTU lab (SJTU)

Simulation

- ILD SDHCAL simulation/reconstruction performance monitoring (Camilo, CIEMAT)
- Tricot simulation (on hold)
- Timing in simulation (on hold)

AIDA++ \Rightarrow Aidanova status

AIDA 2020 Expression of Interest

- EOI #145 PFA (ARTIC) : Included in software WP (50 k€).
- EOI #58 Timing SDHCAL and EOI #57 Tricot electronics : merged and included in WP gaseous detectors \Rightarrow Aidanova : reduced financing (50 k€, Mary Cruz representative)

SDHCAL removed from high granularity calorimeter WP

AIDA++ 2nd Open meeting at CERN, 09/23,

<https://indico.cern.ch/event/838461/>

Publications

Papers, short term

- Transformation of BDT note CALICE-CAN-2019-001 <https://inspirehep.net/record/1718039> into a paper, **In CALICE**.
- An other paper from SJTU : JINST 14 (2019) no.10, P10034 <http://inspirehep.net/record/1762795>.
- Current analysis of test beam data (GRPC uniformity, low energy hadrons, ...) ?
- CHEF 2019 proceedings (mid february),

Notes in preparation

- Bo : APRIL PFA (on hold, **lost contact with Bo**)
- Bing : Low energy hadrons + uniformity studies

Papers, medium term

- More on GRPC response modeling by Clermont ?

Coming meetings

Coming workshops

- Spring 2020 CALICE meeting, March 4-6, McGill
<https://agenda.linearcollider.org/event/8343/overview> Very little SDHCAL presence (2 persons) **Today's discussion**
SDHCAL session, Thursday March 5, 9 am Toronto time
- CLIC week 2020, March 9-13, CERN
<https://indico.cern.ch/event/850899/> Calorimetry R&D session, Wednesday March 11 morning.
- 3rd CEPC Workshop EU Edition, May 4-7, Marseille,
<https://indico.in2p3.fr/event/20053/>

Coming conferences

Abstract closed

Open to abstract

- CALOR2020, May 18-22, Sussex, UK,
<https://indico.cern.ch/event/847884/> (abstract 12/2/19 to 03/27/20)
- TIPP 2020, May 24-29, British Columbia, Canada,
<https://indico.cern.ch/event/864722/> (abstract up to 04/24/20)
- ICHEP 2020 July 30 - August 5, Prague <http://ichep2020.org/> **Abstract deadline February ~~15~~ 25**
- PANIC 2020, August 31 - September 4, Lisbon, Portugal,
<https://indico.lip.pt/event/592/> (abstract up to 04/15/20)

More specialized meetings

Electronics

- Pico-second timing detectors, July 1-3, Zurich, Switzerland,
<https://indico.cern.ch/event/861104/>, abstract up to 06/01/2020

Advanced software

- IML Machine Learning Workshop, June 2-5, CERN,
<https://indico.cern.ch/event/852553/> abstract up to 04/30/2020
- ACAT 2020 (Advanced Computing and Analysis Techniques in Physics Research) September 8-12, Daejon, South Korea,
<https://indico.cern.ch/event/855454/>, abstract up to 04/07/2020

Request from CALICE

News from autumn 2019 CALICE Meeting

- Message from Roman. Clean/update the CALICE twiki page.
<https://twiki.cern.ch/twiki/bin/view/CALICE/SdHCal>

Outlook

Don't hesitate to add any important activity, paper, or conference, I may have miss.

Next meetings

time : Europe (winter) 9-11 / China 16-18 / Korea 17-19

- CALICE meeting
- March 26th
- April 9th

Starting in April, we may move meeting to Tuesday to accommodate for Imad's teaching duty.

Backup

Past meetings

- LCWS2019, October 28 - November 1 2019, Sendai,
<https://agenda.linearcollider.org/event/8217/> : one talk by Bo on APRIL PFA
- CEPC workshop, November 18-20, IHEP, Beijing,
<https://indico.ihep.ac.cn/event/9960/>, a SDHCAL talk by Bing.
- CHEF2019, November 25-29, Kyushu,
<https://indico.cern.ch/event/818783/> 3 talks (Bing, GG, Djamel)
 - PID with Boosted Decision Tree (Bing)
 - Digitizer (Djamel)
 - APRIL PFA (GG)
- RPC2020, February 10-14, Roma,
<https://agenda.infn.it/event/19942/> **No abstract submitted**