Report from the Speaker's Bureau

CALICE Collaboration Meeting

September 8th, 2021

François Corriveau

on behalf of the Speakers' Bureau





CALICE Speakers' Bureau

Role

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Manage Publications (Analysis Notes and Papers)
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Set up Editorial Boards, Indico pages and follow the review process

Participation to <u>Conferences</u>

Before: call for contributions, organize speakers, rehearsals, distribute slides or posters

After: review proceedings, collect documents, update web pages

Organization of Analysis Meetings every ~2 months

<u>Others</u>

Composition

Jerry Blazey (NIU) Vincent Boudry (LLR) Wataru Ootani (Tokyo) François Corriveau (McGill) Chair ex-officio as IB Chair Frank Simon (MPP) Roman Pöschl (LAL)

meet once or twice a year

July 2020 last:

due next:

ex-officio as Spokesperson

Theses

https://twiki.cern.ch/twiki/bin/view/CALICE/CaliceTheses

CALICE Theses

The following theses have been written using CALICE data. These should NOT be regarded as official CALICE results, but are the responsibility of the students concerned.

Ph.D. Theses

- Kostiantyn Shpak
 Development and optimization of highly granular silicon tungsten electromagnetic calorimeter for the International Linear Collider (LLR, École polytechnique, January 2018)
- Sviatoslav Bilokin Hadronic showers in a highly granular silicon-tungsten calorimeter and production of bottom and top quarks at the ILC (LAL and Université Paris Sud, Université Paris Saclay; July 2017)
- Yacine Haddad A highly granular semi-digital hadron calorimeter for a future linear e + e − collider and a model independent Higgs boson measurement
 in the ZH→qq+X channel (École polytechnique; October 2014)

etc..

Groups are strongly encouraged to submit CALICE-related theses here!

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Analysis Notes

https://twiki.cern.ch/twiki/bin/view/CALICE/EditorialBoards

61 available3 on hold in EB



Groups are strongly encouraged to write down notes on their work, also as incentives for papers.

Papers

https://twiki.cern.ch/twiki/bin/view/CALICE/EditorialBoards

27 published4 on hold/stopped3 in EB

	Board	Authors	Title	
Paper031 -> CALICE- PUB-2020-001	Fouz, Cvach, Simon	Liu, Laktineh, Yang	Particle ID in SDHCAL using BDT	Link to drafts ☑
Paper032	Fouz, Cvach, Simon	Liu, Laktineh	Hadron Energy Reconstruction in SDHCAL using BDT	Link to drafts ☑
Paper033	Kawagoe, Zutshi, Grenier	Krüger, Sefkow	AHCAL Prototype	Link to drafts ☑
Paper034	Chadeeva, Sicking, White	Boumediene	Description and stability of SDHCAL	Link to drafts ₫

Status:

Paper 032 – first EB round done, revision completed, round 2 now, collaboration next Paper 033 – submitted in February 2021, first EB round done, new draft almost ready new: Paper 034 – submitted in May 2021, first EB round done, waiting for draft revision

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MC-based Papers

Two papers by CALICE collaboration members have been recently proposed. Both are MC-based, <u>not</u> using CALICE data and thus justifying limited authorships:

"Machine Learning Approach for Validation of Geant4 Hadronic Models at Secondaries Level", M. Chadeeva and S. Korpachev. [see talks on Friday]
This project follows several presentations at CALICE meetings.

"Generation of Artificial Neutral Hadron Showers in A Highly Granular Calorimeter using Cycle-Consistent Neural Networks", J. Rolph, E. Garutti and G. Kasieczka. A draft exists, the AHCAL geometry is used.

CALICE is favorable to such initiatives and appreciates being made aware of them via the Speakers Bureau in order to resolve any potential conflict.

The will also be a presentation by Erik Buhmann on shared data this Friday and an opportunity for discussion.

Conferences

https://twiki.cern.ch/twiki/bin/view/CALICE/CaliceConferenceTalks

2022

• CALOR 2022 (Sussex, UK, May 16-20, 2022)
→ Abstract deadline: 11 March 2022

2021

- ILCX2021 (KEK, Tsukuba, Japan, October 26-29, 2021, virtual)
- PSD12 (University of Birmingham, UK, September 12-17, 2021, virtual)
- PANIC 2021 (Lisbon, Portugal, September 5-10, 2021, virtual)
- EPS-HEP 2021 (DESY/Hamburg, July 26-30, 2021, virtual)
- TIPP 2021 (TRIUMF, Canada, May 24-29, 2021, virtual)
- CPAD 2021 (Stony Brook, USA, March 18-22, 2021, virtual)
- LCWS 2021 (March 15-18, 2021, virtual)
- BTTB 2021 (Lecce, Italy, February 8-11,2021, virtual)
- HEP 2021 (Hong Kong, January 14-21, 2021, virtual)

2020

- FCC 2020 (CERN, Switzerland, November 10-13, 2020, virtual)
- LPCC 2020 (CERN, Switzerland, November 2-3, 2020, virtual)
- CEPC 2020 (Shanghai, China, October 26-28, 2020, virtual)
- AWLC 2020 (SLAC, Stanford, October 19-22, 2020, virtual)
- ICHEP 2020 (Prague, Czech Republic, July 28 August 6, 2020, virtual)
- TIPP 2020 (Whistler, Canada, May 24-29, 2020, postponed)
- CALOR 2020 (Sussex, UK, May 18-20, 2020, postponed)
- INSTR 2020 (Novosilirsk, Russia, February 24-28, 2020)
- BTTB 2020 (Tblissi, Geogia, January 27-30, 2020)

- → abstract submission deadline: September 25th, 2021
- 1 talk (today!)
- 2 talks
- 6 talks, 2 posters (K.Krüger, plenary)
- 3 talks
- 13 talks (R.Poeschl, lecture)
- 1 talk (2 parts)
- 3 talks

3 talks

2 talks

3 talks

1 talk (F.Corriveau, plenary)

2 talks

(start of pandemic)

1 talk

1 talk

29

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13

Conferences

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Thank you to all speakers and to

organize successful CALICE

participation to the conferences!

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the members of the Speakers' Bureau who took turns helping

CALICE Collaboration Meeting September 2021

Speakers' Bureau Report

LCWS 2021 "International Workshop of Future Linear Colliders" (International, 15-18 March, 2021, held online)

CALICE Talks

LCWS 2021

- "Status of the technological prototype of the CALICE highly granular silicon tungsten calorimeter", Adrian Irles
- "Using a precise time measurement in a highly granular calorimeter"
 in, Henri Videau, Jean-Claude brient, Vincent
 Boudry and Fabricio Jimenez Morales
- "A new Front-End Board for the ILD SiW-ECAL"

 →, Jerome Manni et al.
- "The Semi-Digital Hadronic Calorimeter"

 →, Maria Fouz Iglesias et al.

LCWS 2021 "International Workshop of Future Linear Colliders" (International, 15-18 March, 2021, held online)

CALICE Talks

LCWS 2021

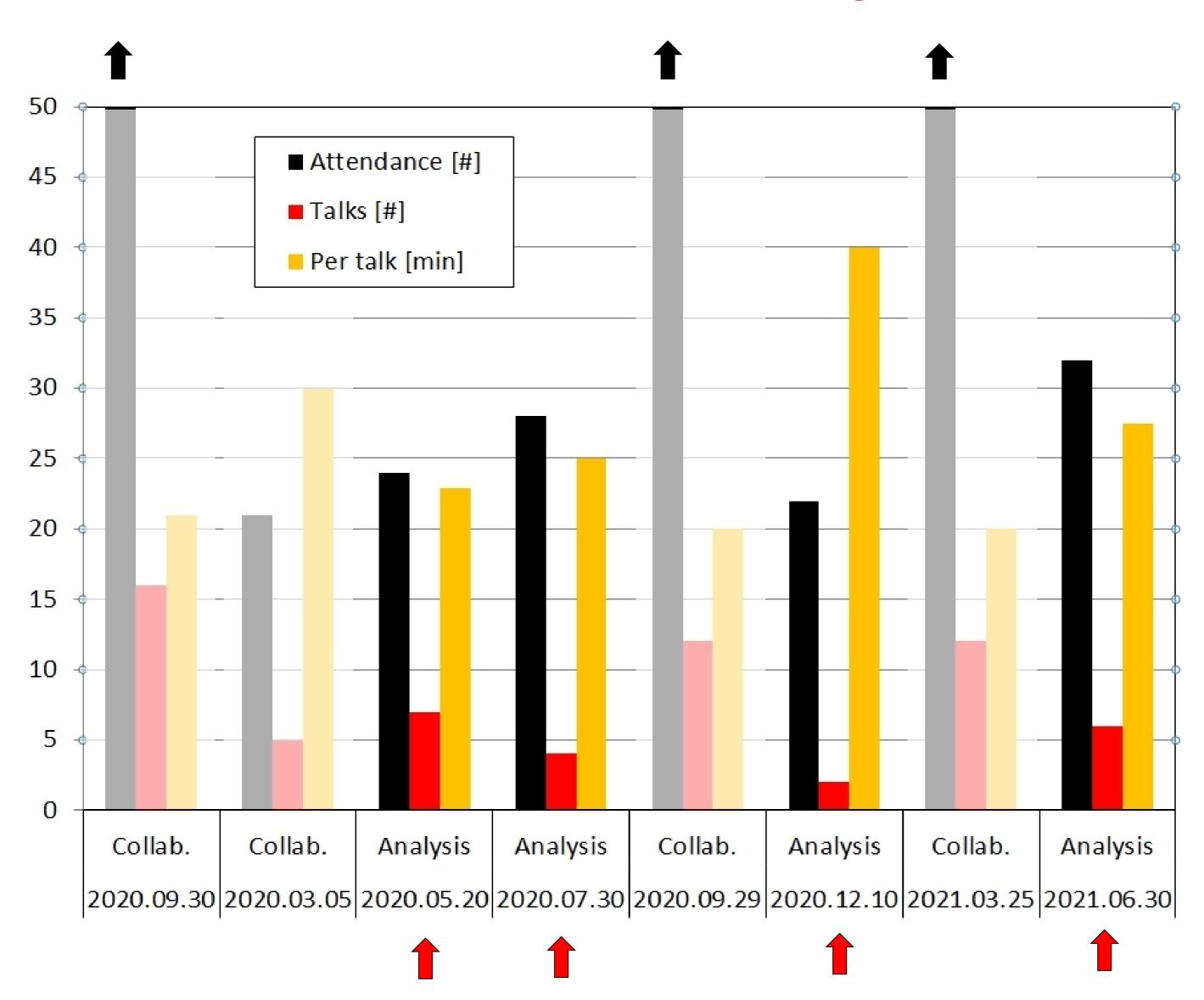
- "Status of the technological prototype of the CALICE highly granular silicon tungsten calorimeter", Adrian Irles
- "A new Front-End Board for the ILD SiW-ECAL"

 →, Jerome Manni et al.

- "SDHCAL technological prototype test beam results" , Hector Garcia Cabrera and Gerald grenier

Many proceedings [for this conference(2) and others] are missing, please give me their arxiv links or infos.

Analysis Meetings



Analysis meetings between collaboration meetings are on since 2020:

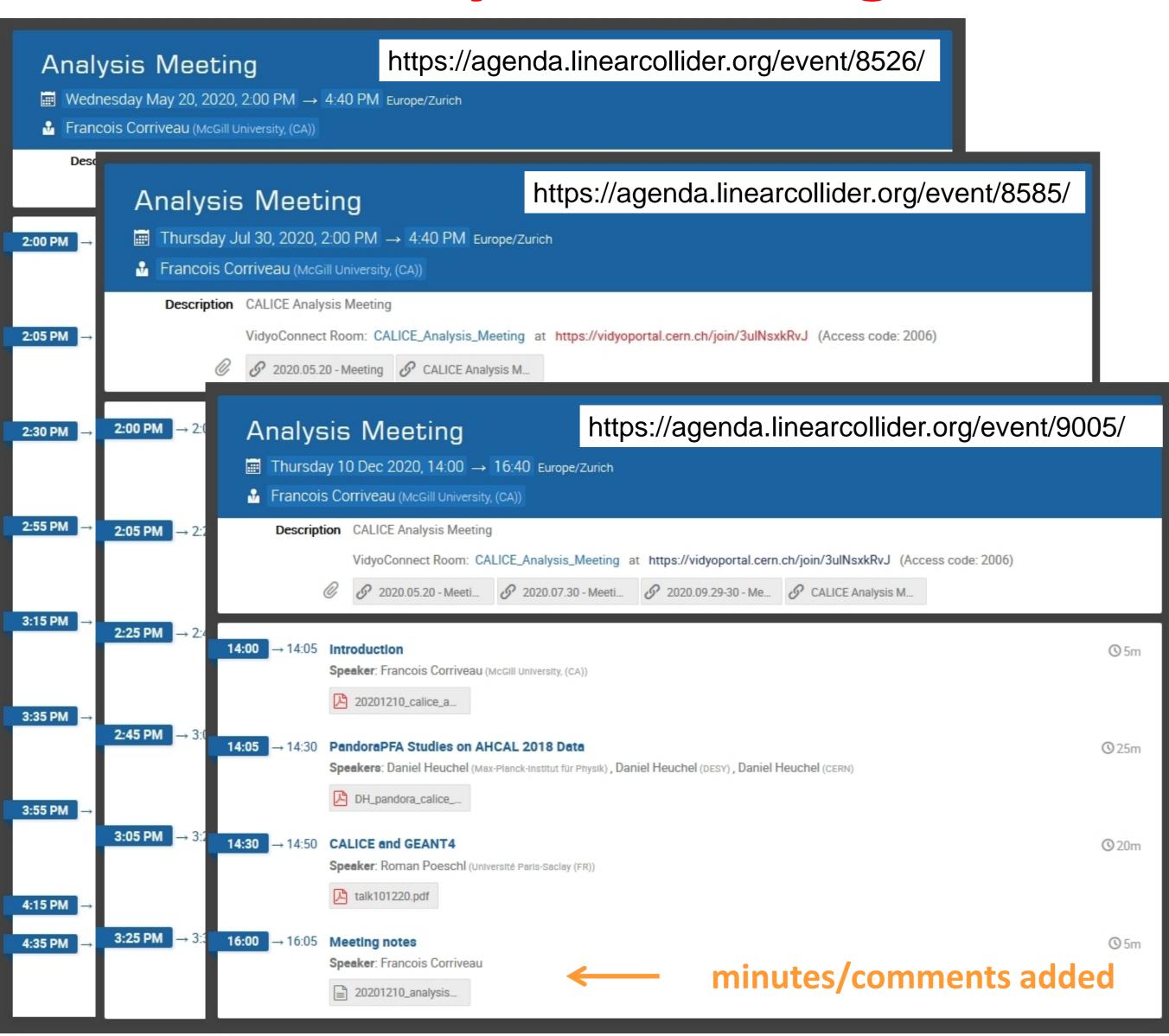
~4-6 presentations each time, with attendance of ~30 participants.

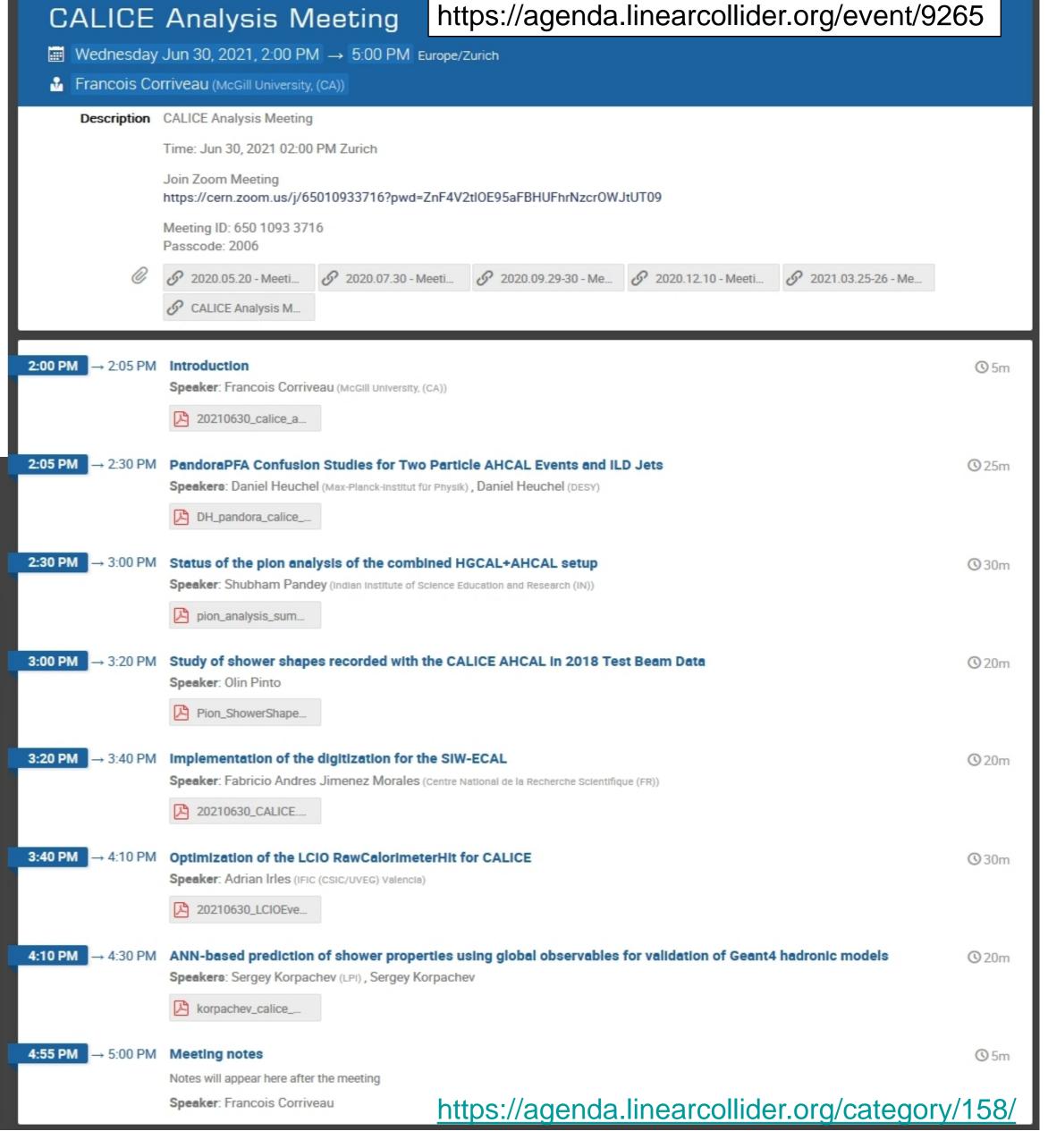
This is an excellent forum for exchange on current issues towards completion of analyses → publications, or special topics.

For example this past June: discussion on the optimization of the LCIO RawCalorimeterHit for CALICE.

Next analysis meeting in Nov./Dec. 2021.

Analysis Meetings





Summary

Publications, presentations and the Home page are the faces of CALICE.

Members are encouraged to contribute:

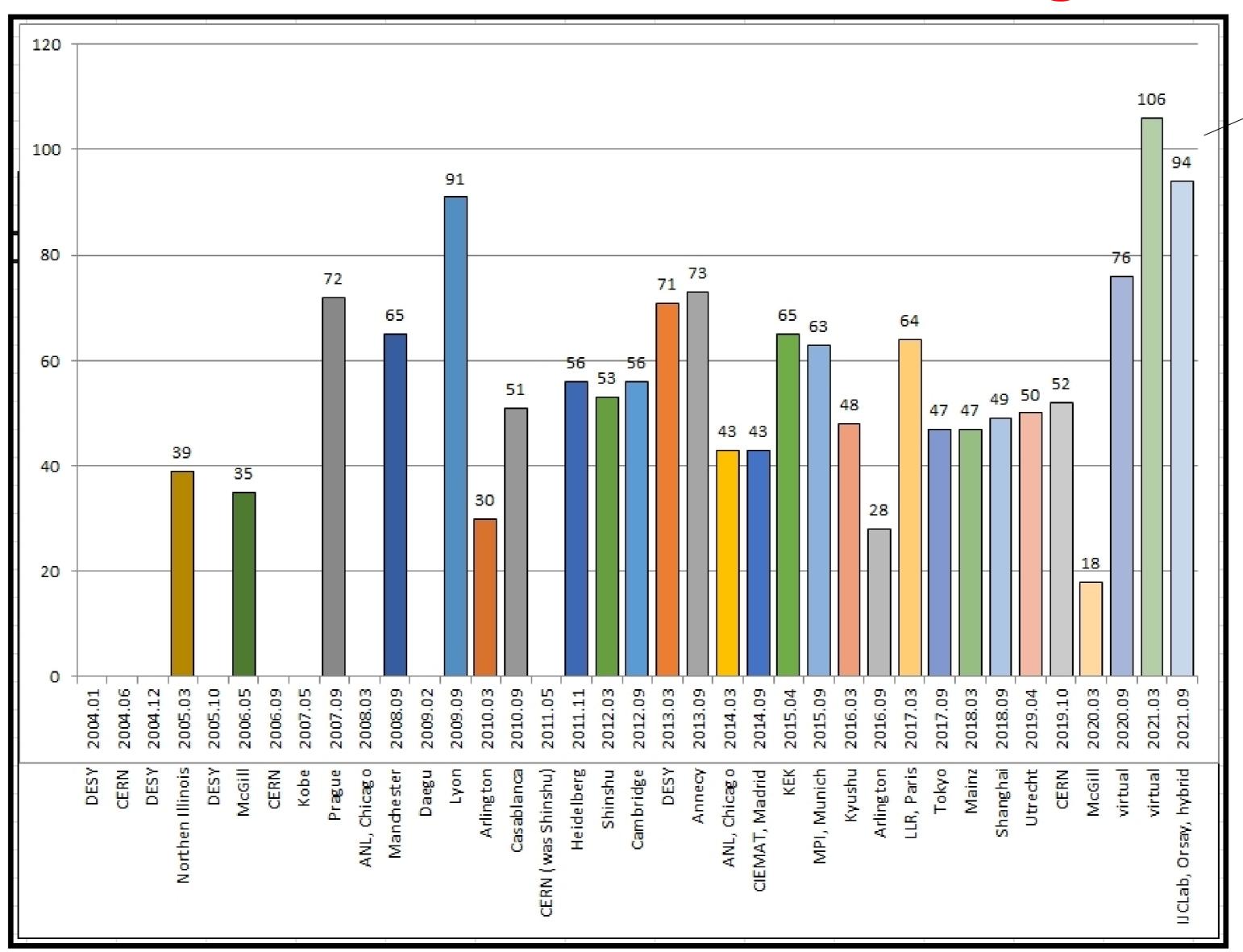
take part in technical/analysis meetings

participate to workshops and conferences

write down their technical or analysis work in the form of CALICE notes and/or publications

make suggestions for changes or improvements ...

CALICE Collaboration Meetings



100 as of yesterday!

Extras

Content

The CALICE Speakers' Bureau

Theses

Analysis Notes

Papers

Conferences

Analysis Meetings

AOB's

Analysis Notes

https://twiki.cern.ch/twiki/bin/view/CALICE/EditorialBoards

61 available
3 on hold in EB

Groups are strongly encouraged to write down notes on their work, also as incentives for papers.

Analysis Notes

.cern.ch/twiki/bin/view/CALICE/EditorialBoards

60 available (58+2) 1 became a paper 3 in EB

	Board	Authors	Title	
CAN058	Sicking, White, Poeschl	Israeli, Simon	Software compensation in the combined calorimeter	Link to drafts.
CAN059 -> CALICE- CAN-2019-001	Cvach, Simon, Fouz	Liu, Laktineh	Particle ID in SDHCAL using BDT	Link to drafts _☑
CAN060 -> CALICE- CAN-2019-002	Fouz, Suehara, Schultz- Coulon	Graf	Time analysis of 2015 tungsten AHCAL data	Link to drafts _☑
CAN061	Wing, Poeschl, Grenier	Brianne	Time analysis of 2015 steel AHCAL data	Link to drafts☑
CAN062	Sicking, Simon, Takeshita	Chadeeva	Software compensation in the W-AHCAL	Link to drafts ☑
CAN063	Masetti, Corriveau, Irles	Provenza, Krüger	Hit time and amplitude corrélation in AHCAL	Link to drafts ☑
CAN064	Laktineh, Simon, van der Kolk	Buhmann, Garutti,	Deep Learning based Energy Reconstruction for the CALICE AHCAL	Link to drafts _☑

EB, June 2019 (version 3)

July 2018 (collaboration review done)

EB, April 2019 (collaboration review)

EB, Sept 2019
(? based on MSc E. Buhmann)

Will confirm status of notes and update the page next time ..

Groups are strongly encouraged to write down notes on their work, also as incentives for papers.

Analysis Meetings

CALICE had analysis meetings in the past. At the Institute Board of the last collaboration meeting at CERN in September 2019, it was decided, under the purview of the Speakers' Bureau, to:

- revive these meetings, to take place every 2 months or so.
- discuss common analysis issues and
- encourage exchanges towards common solutions.

In addition to the analysis session of the collaboration meeting at McGill in March (5+ talks), two analysis meetings took place up to now in 2020:

- May 20: 7 talks, 24 participants
- July 30: 4 talks, 28 participants

very interesting and successful!
several analyses coming to maturity

Next: analysis session this week (12 talks, September 29-30) and in November 2020.

Conferences

https://twiki.cern.ch/twiki/bin/view/CALICE/CaliceConferenceTalks

after CERN meeting (Sept 2019)

- IEEE 2019 (Manchester, UK, October 29 November 2, 2019)
- LCWS 2019 (Sendai, Japan, October 28 November 1, 2019)
- CHEF 2019 (Fukuoka, Japan, November 25-29, 2019)
- BTTB 2020 (Tblissi, Georgia, January 27-30, 2020)
- INSTR 2020 (Novosibirsk, Russia, February 24-28,2020)

since McGill meeting (March 2020)

- CLIC Week 2020 (CERN, Switzerland, March 3-13, 2020)
- CALOR 2020 (Sussex, UK, May 18-22, 2020)
- TIPP 2020 (Whistler, Canada, May 24-29, 2020)
- ICHEP 2020 (Prague, Czech Republic, July 20 August 5, 2020)
- Snowmass Instrumentation Frontier Calorimetry (Sept 14, 2020)

coming next virtually

- AWLC 2020 (*SLAC, USA*, October 19-22, 2020)
- CEPC 2020 (Shanghai, China, October 26-28, 2020)
- LPCC 2020 (CERN, Switzerland, November 2-3, 2020)
- FCC 2020 (CERN, Switzerland, November 10-13,2020)

Organizer, notes

V. Boudry

W. Ootani

- J. Blazey (14 abstracts \rightarrow 12 talks, summary)
- F. Corriveau, 1 talk (M. Manzano)
- F. Corriveau, 1 talk (M. Chadeeva)

cancelled

delayed by one year

cancelled

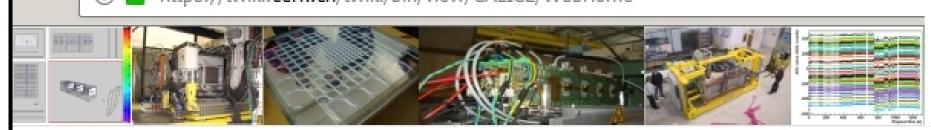
R. Pöschl, 2 talks (V. Boudry, W. Ootani)

CALICE overview talk by F. Simon

- F. Corriveau to give the calorimeter overview talk
- R. Pöschl, 1-hour CALICE: overview, technical solutions, results

(detector simulation, organized by Geant4 collaboration)

R. Pöschl, 1-hour CALICE: overview, technical solutions, results



CALICE Home Page

TWiki > CALICE Web > WebHome (2021-02-02, RomanPoeschl)



Developing highly granular calorimetry optimised for particle flow event reconstruction for future energy-frontier electron-positron colliders, focusing on the linear colliders ILC and CLIC.

Members of the CALICE Collaboration are encouraged to update these pages.

Next CALICE Collaboration meeting: Online Meeting 24 March - 26 March 2021 ☑

Feedback from CALICE to Questions by ECFA-NuPECC-ApPEC Recognition Working Group (November 2020)

CALICE Letters of Interest to the US Snowmass 2021 Community Study (Instrumentation Frontier/IF6:Calorimetry () are available here

In November 2018, CALICE has been reviewed by the ECFA Detector R&D Panel

☑. The report by the review panel is available here.

Main Topics

Test Beams	The Data Taking, From 2007 Onwards
Software	CALICE-specific and ILC
Papers	Published and Preliminary Results, guidelines and procedures (see also talks and theses); forthcoming conferences.
Detectors	Detector Subsystems
MC Production	Collaboration-wide Simulations
Data	Data Analysis (see also good runs) Includes analysis tips and examples of useful Marlin processors
DAQ	DAQ System for the Technical Prototype
Meetings	Indico⊡



revamping still on the todo list for the CALICE Management.

e.g.: add links to analysis meetings