

Frank Simon Max-Planck-Institute for Physics

CALICE Collaboration Meeting, Shanghai, China, September 2018



CALICE @ Shanghai - Introduction -

 $\Delta p \cdot \Delta q \ge \frac{1}{2} t$

Max-Planck-Institut für Physik (Werner-Heisenberg-Institut)



Welcome

to Shanghai

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A first for CALICE:

Our first collaboration meeting in China

... an opportunity to connect to the Chinese community!











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 - Two successful test beam periods with the full AHCAL technological prototype with the smoothest start-up we have experienced so far with a completely new prototype
 - Detailed understanding of SiW ECAL sensors in test beams at DESY
 - Submission of the first *paper* on hadronic energy resolution in a combined ECAL, HCAL, TCMT setup (all scintillator)

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- And more to come:
 - Combined SiW ECAL + SDHCAL test beam right after this meeting
 - Further combined beams of CMS HGCAL and AHCAL
 - ...



t after this meeting HCAL

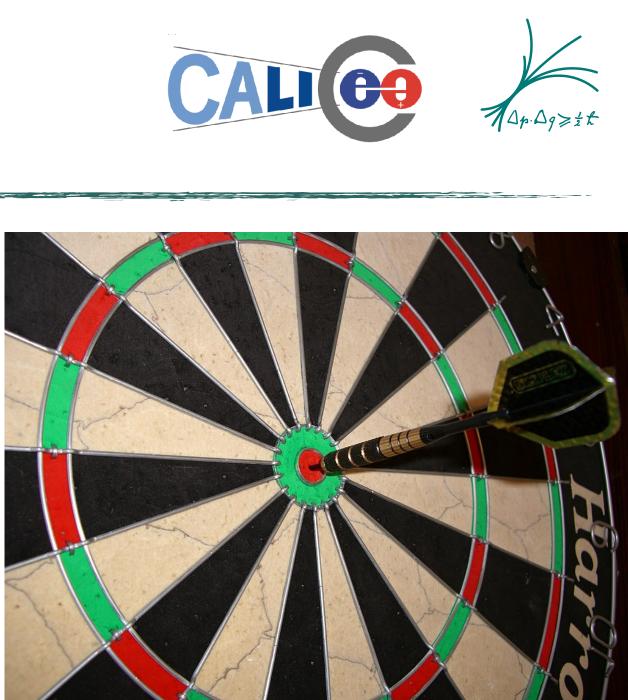




- Homing in on the original goals set for CALICE:
 - Proof of the principle of highly granular calorimetry
 - Establishment of viable technical solutions for collider experiments
 - Common running and performance analysis of ECAL + HCAL systems









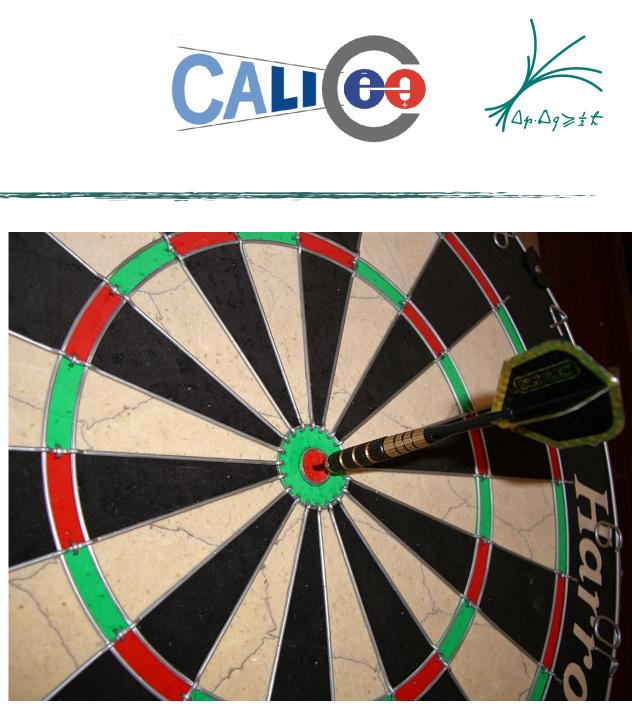
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How do we make our results as useful as possible to the wider community?

- Should we provide a evaluation of the strong and weak points of the different technologies we are studying - to inform choices of experiments?
- application in the "optimisation" parameter space.
- Would be a compact resource on experience with different technologies in CALICE







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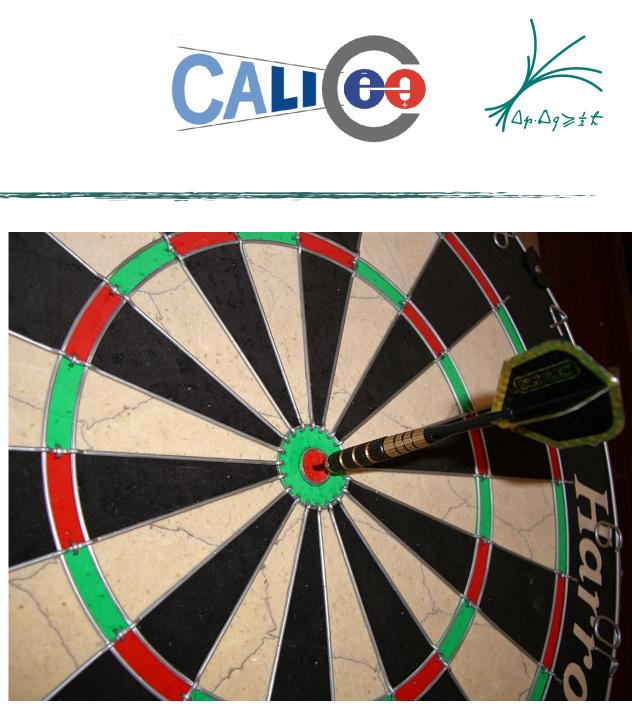
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A clear vision on this would be helpful in the context of the next review of CALICE and - more globally: Gains increasing relevance once concrete projects fall into place







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Evolving Landscape

An exciting time ahead

- - - Japanese committees



• The HEP community is ramping up for the update of the European Strategy for Particle Physics in 2020 • A key input to this process will be a statement by Japan on ILC - has to come by the end of this year • No way to tell at the moment how things are going - but there is a high level of activity in the relevant

• Developments on CEPC / SppC also highly relevant for this process - we'll hear more about this here!





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 - Linear Collider strategy meeting exact dates tbd, expected late March / early April 2019
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 \Rightarrow Expect a (much?) clearer view on future projects at our next collaboration meeting!



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CALICE Review By ECFA R&D Panel

- first project to be reviewed by this panel: November 6 & 7 at DESY
- More information on ECFA panel: <u>http://ecfa-dp.desy.de</u>
- of the panel members will participate in the review, with additional outside experts to be identified in discussion between panel and project
- Review Panel members:
 - Martin Aleksa
 - Silvia Dalla Torre (ECFA panel member)
 - Doris Eckstein (ECFA panel member)
 - Marek Idzik
 - Arno Straesser (ECFA panel member)



• In 2016, the mandate of the ECFA Detector R&D panel was updated and adjusted - CALICE will be the

• The way reviews are handled by the new ECFA panel is different than previous such panels: Only a subset

 Contact person for CALICE in the panel (not part of the reviewers): Lucie Linssen





Agenda Outline

agenda, which has already been discussed twice in the Technical Board:

Tuesday, November 6:

- 8:30 9:00 Closed Session for Panel
- 9:00 12:30 Talks by CALICE: Introduction & Overview; Technical Developments
- 13:45 16:00 Talks by CALICE: Performance & Analysis; Outlook
- 16:00 17:00 Closed Session for Panel
- 17:15 18:45 First Feedback, Follow-up Questions and Discussion
- Dinner restricted participation, details to be worked out

Wednesday, November 7:



• Following discussions with our ECFA DP contact and the panel chair, I have worked out a proposal for the

8:00 - 13:00 Closed Session for Panel, Closeout - selected CALICE members available for questions





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Wednesday, November 7:

Broader participation of the collaboration, extending beyond speakers, management (and local groups), is strongly encouraged!

For registration, accommodations etc. see <u>https://indico.desy.de/indico/event/21353/</u>



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Input, Questions for this Meeting

- Input to be provided by CALICE for the review:
 - before the review



• A short executive summary document, which also contains pointers to key references and presentations to help panel members not familiar with CALICE to get up to speed. Here we should aim for ~ 10 pages, and avoid to go longer than 20 pages or so. This document should be available at least two weeks

• Presentations on all major technologies, analysis, publications, future plans. *The final (e.g. frozen)* version of the slides should be made available to the panel at least one week before the review





Input, Questions for this Meeting

- Input to be provided by CALICE for the review:
 - before the review
- For this collaboration meeting:
 - **Define** talks and speakers
 - **Define** common structure for technical talks, to be followed as much as possible
- concerns!



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Will do this in dedicated sessions - feel free to approach me any time with additional ideas, questions or





Upcoming Events

Direct Relevance for CALICE

- LCWS 2018, October 22 26, 2018, Arlington, TX, USA
- CEPC Workshop 2018, November 12 14, 2018, Beijing, China
- CLIC Week 2019, January 21 25, 2019, CERN
- VCI 2019, February 18 22, 2019, Vienna, Austria
- AIDA 2020 Annual Meeting, April 2 5, 2019, Oxford, UK

• ...

- Next CALICE Meetings:

 - Proposal for Spring 2019: April 10 -12, 2019, Utrecht, The Netherlands to be discussed this week • Looking for proposals for Fall 2019: Please contact me!







Finally...

... lets get to work!



Introduction - CALICE Collaboration Meeting, September 2018



Enjoy the Meeting!

