

Introduction and News

ALLEGRO Ecal General Monthly Meeting, 30/01/2025

Nicolas **Morange**, *IJCLab*

Jana **Faltova**, *Prague*

Brieuc **François**, *CERN*

Giovanni **Marchiori**, *APC*

Fernando **Aretio Zarate**, *CERN*

Juska **Pekkanen**, *CERN*



DRD6 Orsay Meeting at IJCLab

- **Dates: April 1st (1pm) to 4th (noon)**
 - April 1st afternoon: parallels \Rightarrow ALLEGRO ECal meeting
 - April 2nd to 4th: plenaries
- **Registration will open soon**
 - You will receive an email from Roman

ALLEGRO Ecal meetings 2024

- January 30
- February 27
- Week of March 31 (DRD6)
- April 24
- May 14
- June 12
- Prague Workshop

ALLEGRO EOIs

Ecal EOI

- All comments received implemented
- Author list circulated to IB for completion
 - **Deadline for amends was yesterday, please let us know today if any last minute change**
- Will submit the EOI tomorrow

ALLEGRO Detector Concept EOI

- Draft circulated by Martin.

News: Conferences

List of conference for 2025 was updated

- Let me know if you know about any other interesting conference

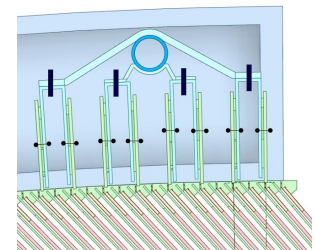
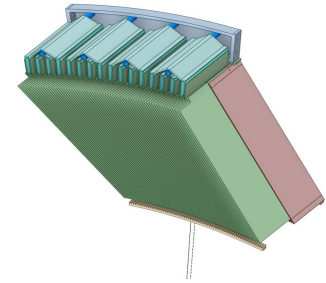
8th FCC Physics Workshop	13.-17.1.2025	CERN	Nicolas Morange	Noble liquid calorimetry
VCI 2025	17.-21.2.2025	Vienna, Austria	Martina Maria Koppitz (poster)	
18th Cryogenics 2025	7.-11.4.2025	Prague, Czechia	Fernando Aretio Zarate	
EPS HEP 2025	7.-11.7.2025	Marseille, France	abstracts before 15.4.	
Lepton Photon 2025	25.-29.8.2025	Madison, Wisconsin, USA	abstracts before 31.3.	
Twepp 2025	6.-10.10.2025	Crete, Greece	abstracts before 30.4.	
IEEE NSS MIC	1.-8.11.2025	Yokohama, Japan		
PIC 2025	20.-23.10.2025	Kairo, Egypt	abstracts before 15.5.	

News: Simulations

- Good progress on adding proper z position to ECal sim hits (Scott S)
 - [PR](#) in review
- ECal barrel: studies ongoing of photon/pi0 discrimination and impact of noise and xtalk -> see Zhibo W's talk later
- ECal endcap: topoclustering now working, [PR](#) in review
- Muon: added basic digitisation (needed for running pandoraPFA), [PRs](#) ready
- Pandora p-flow:
 - [PRs](#) prepared to make it possible to run pandora PFA on ALLEGRO
 - tuning of existing algorithms or development of dedicated ones needed
 - informal chat every Thursday afternoon @3:30 on high-level reco (cross-detector) - <https://cern.zoom.us/j/67268767764>,
- Info on full-sim: https://allegro.web.cern.ch/full_simulation/fullsim/

CERN and CPPM

- Paper submitted and accepted for Cryogenics 2025 (7-11 April):
 - *Mechanical design of the barrel electromagnetic calorimeter of the ALLEGRO full detector concept at the FCC-ee collider*
 - Unofficial link: <https://cernbox.cern.ch/index.php/s/85n1m83Fk6k8Lfs>
- Chiara (+ BLN): heat transfer problem for the cold electronics. WIP.
- Are Tungsten absorbers a possibility?
 - Pros: More rigidity \Rightarrow No need of external layers
 - Cons: Manufacturing big plates. By the moment, any of the contacted manufacturers can build plates of 2 meters.
- Presentation afterwards:
 - Design for a prototype: external rings and stainless steel little bars.
 - Design of the tooling for assembly the test beam prototype.



- Note written by Ronic on electrode measurements and studies at IJCLab
 - Made public on [HAL](#), while waiting for the DRD6 section of CDS to be created.
- New PCB prototypes in production and *almost* on schedule
 - Delay of “at least one week”
 - Bottleneck in the PCB pressing workshop
 - Some “machine breakdowns” in the PCB lab during the year-end break

Agenda for today

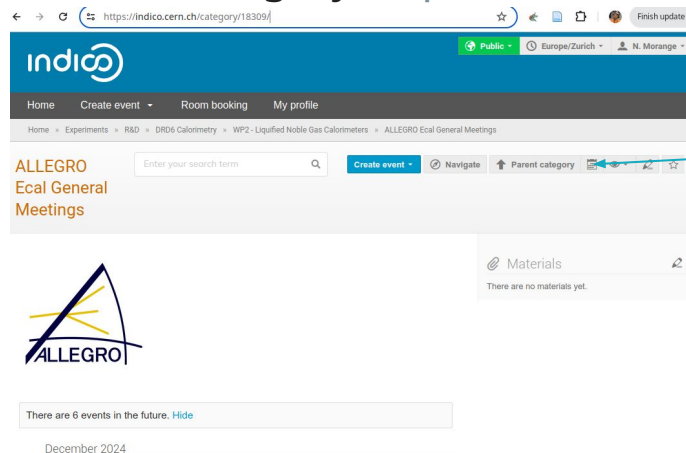
15:00	→ 15:30	Introduction and news	🕒 30m	📄 ▾
Speakers: Brieuc Francois (CERN), Fernando Aretio Zárate (CERN), Giovanni Marchiori (APC, CNRS/IN2P3 and Université Paris Cité), Jana Faltova (Charles University (CZ)), Juska Pekkanen (CERN), Nicolas Morange (Université Paris-Saclay (FR))				
15:30	→ 15:50	Update on mechanics	🕒 20m	📄 ▾
Speakers: Fernando Aretio Zárate (CERN), Pierre Karst (Centre National de la Recherche Scientifique (FR)), Pierre Karst (Faculte des Sciences de Luminy)				
15:50	→ 16:10	ECAL response studies with FCCSW	🕒 20m	📄 ▾
Speaker: Juska Pekkanen (CERN)				
16:10	→ 16:30	Updates on photon/pi0 studies with cross-talk	🕒 20m	📄 ▾
Speaker: Zhibo Wu (Centre National de la Recherche Scientifique (FR))				

Next meeting

- February 27th, 3:00pm CET
 - <https://indico.cern.ch/event/1483297/>

NB: useful trick to automatically add Indico meetings to your agenda

- Go to category <https://indico.cern.ch/category/18309/>



The screenshot shows the Indico website interface. At the top, there's a navigation bar with 'Home', 'Create event', 'Room booking', and 'My profile'. Below that, a breadcrumb trail reads 'Home > Experiments > R&D > DRD6 Calorimetry > WP2 - Liquefied Noble Gas Calorimeters > ALLEGRO Ecal General Meetings'. The main heading is 'ALLEGRO Ecal General Meetings'. There's a search bar and a 'Create event' button. A blue arrow points to a link icon in the breadcrumb trail. Below the heading is the ALLEGRO logo. At the bottom, it says 'There are 6 events in the future. Hide' and shows a calendar for December 2024 with a '19 Dec ALLEGRO Ecal monthly meeting' event.

Click !



The screenshot shows the 'Export' menu for a category. The 'Category' option is selected. Below it, there's a section titled 'Synchronize with your calendar' with the text: 'You may copy-paste the following URL into your scheduling application. Contents will be automatically synchronised.' A text box contains the URL 'https://indico.cern.ch/category/18309/events.ics?usi' and a download icon. Below that, there's a 'Download' section with the text: 'Download an iCalendar file that you can use in calendaring applications.' and another download icon.

Copy to clipboard then add to e.g Google calendar

Useful links

- Allegro meetings
 - <https://indico.cern.ch/category/17590/>
 - Only “General meetings” subcategory so far
 - Can create new categories on demand
- Allegro website
 - <https://allegro.web.cern.ch/>
 - **Updated regularly !!!!**
- Mattermost channel
 - https://mattermost.web.cern.ch/signup_user_complete/?id=txazc7mpqibg7dfugn8hs8rx5h&md=link&sbr=su
- FCC Twiki (lots of useful links inside)
 - <https://twiki.cern.ch/twiki/bin/view/FCC>