

# HFCC-PED Advisory Board

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# FY26 Allocations

Group	Description	Who?	FTE	Request (\$k)	Allocated (\$k)
AIM	Lead developer of AI detector optimization pipelines	Princeton	0.2	38	38
	Workshop support			10	0
TDAQ	Development of Digitization framework	T. Oli	0.2	70	60
Muons	Muon Drift Tubes (Jianming Qian)	Michigan	0.2	50	50
	Micro-Rwell (Marcus Hohlmann)	FIT/JLAB		43	40
Calo	DR Crystal and Fiber Calo (Grace Cummings)	Fermilab/Princeton		45	25
	LAr design of turbine structures (E. Varnes)	Arizona		45	45
	LAr Thermal management studies	BNL		30	0
S&C	Docs and Training support	Princeton	0.2	55	55
	Core SW in Key4HEP (Paolo Calafiura)	LBNL	0.2	68	68
	MC Production (David Lange)	Princeton	0.3	52	38
	Training/Workshops			52	0
Tracker	Strawtube (Junjie Zhu)	Michigan		100	30
	Wire chambers	BNL, SLAC		45	0
	MAPS (Artur/Caterina)	FNAL, SLAC		250	50
	Tracker Simulation (Christoph Paus)	MIT		70	15
	Low Mass Mechanics (Andreas Jung)	Purdue		25	5
<b>Grand Total</b>				<b>1,048</b>	<b>519</b>

# FY27

What we would ideally like to do?

- Each (sub)coordinator prepares a prioritized list of activities, appropriate justification, milestones, FTE level and estimated funding needs.
- Prioritization depends on the criticality of pursuing this effort in FY27:
  - Is this a continuation of a US effort that needs to be completed?
  - Is it unique US expertise and contribution?
  - Does it help maintain US engagement and leadership in FCC/DRDs?
  - What is the impact of not pursuing this task?
- The L1 coordinators provide the prioritization across their domains (Detector, S&C, Physics, Communication).
- PED chairs in consultation with Advisory Board and Steering Group provide the overall prioritization across all efforts, incl. allocating funds for travel etc.

# Process

We pursued the process in previous years.

- The total ask in FY25 exceeded \$3M, but funding was limited to 500k.
- In FY26, we provided funding guidance to each L2 coordinators limiting the total request to about \$1M. This helped us allocate the 500k we received.
- Should we pursue the same approach?
  - Note that many of the efforts listed in previous slide – in particular the software & computing efforts, would need to be preserved to maintain continuity of services provided to the US FCC community.
  - Our HFCC-PED Steering committee strongly recommends that we go through a bottom-up process and document and prioritize all our FY27 needs even with limited expected funding.
- Such a process is helpful to inform the agencies on the real need and the impact of insufficient engagement in such efforts – if it could help to realize additional funding.
  - But we are aware that similar considerations arise from other programs. Other high-priority programs (HL-LHC, DUNE...) and limited HEP budget makes additional FCC funding unlikely in FY27.

# KA25

- KA25 focuses on generic detector R&D overseen by Helmut Marsiske.
- It has supported critical efforts required for FCC,
  - An example of such an effort in the CalVision program
  - <https://detectors.fnal.gov/projects/calvision/>
  - Detector R&D on segmented EM crystal and fiber dual readout calorimeter where US leads this effort (concept proposed for the IDEA detector concept).
  - This was entirely funded by KA25, FCC provided minimal funds for test-beam efforts.
- We have been told that KA25 will no longer support this as this is targeted R&D. KA25 will only support blue-sky. Helmut has informed the clients that they need to discuss continuation of this R&D effort in FY27 with FCC.
  - FCC does not have the funds to accommodate scope that has been moved out of KA25!

## Note: We rely on our Lab partners

- We significantly rely on our laboratory partners to supplement the minimal FCC funding.
  - US FCC funds largely supported efforts at Universities (slide 2) because better \$/FTE.
- LDRDs at BNL support an Analysis Facility, S&C work, R&D on LAr calorimeter (Allegro) and MAPS development.
- LDRDs at Fermilab support efforts on MAPS as well as recently approved LDRD for software development.
- Ongoing process to secure Lab funds at LBNL and SLAC.
- We are visiting Fermilab and ANL on May 11/12 to discuss this further with the management and encourage them to invest further.
  - But the Labs are also coming under increasing budget pressures and this is not sustainable. The aim was to transition a limited 3-year LDRD to a more sustained DOE funding.
- We are also planning to visit labs on the West Coast around the days of the US-FCC workshop

## Separate note

- **FCC Week:** <https://indico.cern.ch/event/1552126/>  
June 8-12 Helsinki
- Would be important to have US representation, please consider joining!
  - Also note [open abstract submission](#) and [Early Career Researcher Awards](#)
- U.S. FCC week: SLAC, September 8-11, 2026
- Larger Question:
  - Travel funds for FCC related events? It is important to have a healthy US representation at these international events.

