



AIDA2 Update: Advanced Hybrid Pixel Detectors

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3D/Active edge sensors with FBK
Vidyo, 30 May 2014*



Indico agenda:

<https://agenda.infn.it/conferenceDisplay.py?confId=8160>

• *Three activities:*

- **μ -channel cooling** – still in discussion planned a meeting at CERN on 10/6 (<https://indico.cern.ch/event/321505/>)
- **Advanced Hybrid Pixel Detectors - AHPD** (WP5) – in discussion here. Received a draft document and cost table
- **HV-CMOS** (WP6) – still in preparation

• *AHPD*

- Each beneficiary lab should receive 50 k€ from EU funds
- FBK & CNM larger contribution
- Total of 750 k€ from EU

- *Task 5.1: Scientific coordination and communication – lead by: MPP, **INFN-TO**, **INFN-TN**, CSIC-CNM.*
- *Task 5.2: TCAD Simulations – Lead by **INFN-TN** – participation*
 - Subtask 5.2.1: Simulation of new 3D sensor designs – lead by **INFN-TN**
 - Subtask 5.2.2: Simulation of planar pixel sensors with active edges – lead by CERN-LCD
 - Subtask 5.2.3: Simulation of LGAD sensors – lead by **INFN-TN** (? or TO?)
 - Subtask 5.2.4: Extension of radiation damage model at high fluences – lead by **INFN-PG**
- *Task 5.3: Common process optimization for hybrid pixel sensors – lead by CSIC-CNM with participation of FBK*
 - Subtask 5.3.1: Process optimization for advanced hybrid pixel detectors
 - Subtask 5.3.2: Processing of MPW runs for 3D and planar pixel sensors
 - Subtask 5.3.3: Common submission of LGAD sensors
- *Task 5.4 Detector validation for tracking devices – lead by MPG-MPP*
 - Subtask 5.4.1 Detector validation for 3D sensors – lead by Manchester
 - Subtask 5.4.2 Detector validation for planar sensors – lead by MPP
- *Task 5.5 Detector validation for timing applications – lead by **INFN-TO***
 - Subtask 5.5.1: Detector validation for LGAD sensors

Money Matrix

AIDA 2 - WP Name - Task 5.1: Coordination

Beneficiary short name*	Institute	Total costs (direct + indirect)	EC requested funding
MPG	MPP	0.00	
CSIC	CNM	0.00	
INFN	Trento	0.00	

AIDA 2 - WP Name - Task 5.2: TCAD SIMULATION

Beneficiary short name*	Institute	Total costs (direct + indirect)	EC requested funding
INFN	Perugia	125 062.50	50 000.00
INFN	Trento	125 062.50	50 000.00
CERN	LCD	124 875.00	50 000.00

AIDA 2 - WP Name - Task 5.3: Process optimization

Beneficiary short name*	Institute	Total costs (direct + indirect)	EC requested funding
CSIC	CNM	312 500.00	125 000.00
FBK		312 500.00	125 000.00

AIDA 2 - WP Name - Task 5.4: Detector validation (3D and planar sensors)

Beneficiary short name*	Institute	Total costs (direct + indirect)	EC requested funding
CERN	LCD	124 000.00	50 000.00
MPG	MPP	123 750.00	50 000.00
Manchester		124 750.00	50 000.00
INFN	Milano	123 500.00	50 000.00
INFN	Firenze	123 500.00	50 000.00

AIDA 2 - WP Name - Task 5.5: Detector validation (LGAD sensors)

Beneficiary short name*	Institute	Total costs (direct + indirect)	EC requested funding
INFN	Turin	123 500.00	50 000.00
CSIC	IFIC	125 000.00	50 000.00

AIDA 2 - WP5 Name - Summary

Tasks (all costs in €)	Total costs (direct + indirect)	EC requested funding
Task 5.1	0.00	0.00
Task 5.2	375 000.00	150 000.00
Task 5.3	625 000.00	250 000.00
Task 5.4	619 500.00	250 000.00
Task 5.5	248 500.00	100 000.00
Total	1 868 000.00	750 000.00
Fixed target for EC funding (negotiation)		750 000.00
Checking the condition		OK

Beneficiary short name*	Total costs (direct + indirect)	EC requested funding
MPG	123 750.00	50 000.00
CSIC	437 500.00	175 000.00
CERN	248 875.00	100 000.00
INFN	620 625.00	250 000.00
Manchester	124 750.00	50 000.00
FBK	312 500.00	125 000.00
Total	1 868 000.00	750 000.00