

FTK-IAPP *General Assembly & Executive Board* Meeting - Pisa; Skype connection, November 12 - 2014
MINUTES

The following representatives have been invited to the GA:

Mauro Dell'Orso – UNIPi, Chair	present in Pisa
Kostas Kordas – AUTH, Member	connected by skype from AUTH
Alessandro Iovene – CAEN, Member	present in Pisa
Betty Magnin – CERN, Member	connected by skype from CERN
Giovanni Calderini – CNRS, Member	present in Pisa
Petros Soukoulis – PRIELE, Member	Absent
Simone Donati – UNIPi, Member	present in Pisa

The following representatives have been invited to the EB:

Mauro Dell'Orso – UNIPi, Project Coordinator, Chair	present in Pisa
Kostas Kordas – AUTH, WP 7 Coordinator, Member	connected by skype from AUTH
Dimitrios Sampsonidis – AUTH, WP 8 Coordinator, Member	connected by skype from AUTH
Paola Garosi – CAEN, WP 2 Coordinator, Member	connected by skype from CAEN
Francesco Crescioli – CNRS, WP 6 Coordinator, Member	connected by skype from Paris
Andreas Sakellariou – PRIELE, WP 1 Coordinator, Member	connected by skype from Athens
Marco Piendibene – UNIPi, WP 5 Coordinator, Member	present in Pisa
Chiara Roda – UNIPi, WP 4 Coordinator, Member	present in Pisa
Betty Magnin – CERN, WP3 Coordinator, Member	connected by skype from CERN

Other Participants:

P. Giannetti, P. Luciano – INFN Pisa	present in Pisa
K. Mermikly - Prisma Electronics	connected by skype from Athens
C. Gentsos, S. Gkaitatzis, & I. Maznas – AUTH	connected by skype from AUTH
S. Citraro, C.L. Sotiropoulou, G. Volpi – UNIPi	present in Paris

The slides are available at the site

<https://agenda.infn.it/conferenceDisplay.py?confId=10321>

This is the Agenda:

General Assembly:

- 11:00 – 11:30 Deliverables & Milestones 30' - P. Giannetti

Executive Board:

- 11:30 - 11:50 SW and FW ready for training & image processing 20' - C. Sotiropoulou
- 11:50 - 12:10 SLP1 simulation and tests 20' – C. Gentsos
- 12:10 - 12:30 FTK first production commissioned->final prototypes ready 20' – M. Piendibene
- 12:30 - 13:30 Lunch
- 13:30 - 13:50 tests at CERN 20' – P. Kalaitzidis
- 13:50 - 14:00 Experience on DCS 10' – K. Mermikly
- 14:00 - 14:20 Integration at CERN 20' – N. Kimura
- 14:20 - 14:30 Performance of natural still image processing 10' – A. Gkaitatzis
- 14:30 - 14:50 CAEN PS Atlas review and Summer 2015 activity 20' – G. Calderini
- 14:50 - 15:10 The SLP1 test stand and outreach events in Paris 20' – F. Crescioli
- 15:10 - 15:30 School, Outreach activities at AUTH 20' - K. Kordas
- 15:30 - 15:50 Web site 20' – S. Donati

Here follows a synthesis of the discussed arguments:

Deliverables & Milestones - talk Paola Giannetti

(1) Next Deliverables and Milestones

The Deliverables in the first half of the year 2015 are:

In yellow are signed the person in charge of these documents.

D.3.1. FTK demonstrator commissioned	Pub PU M22 paper IEEE NSS/TNS	Paola
It was submitted last year to Date but it was not accepted. – submitted to IEEE TNS this year		
D.6.2. Standard characterization	R RE M24	Calderini DONE
D.4.4. Trigger table for demonstrator with performance prediction	Pub PU M25 Public Note	DONE
https://cds.cern.ch/record/1755840/files/ATL-DAQ-INT-2014-005.pdf		
D.5.1. Infrastructure at CAEN for Image Processing	R RE M26	Paola DONE
D.4.5 SLP1 architecture simulation	Pub PU M28 -	Christos DONE IEEE NSS
TO BE DONE		
D.5.2. Software & firmware ready for training and image processing	R RE M30	Calliope/AKIS - PAOLA

The Deliverables in the second half of the year 2015 are:

D.1.2. 1 st FTK production assembled at PRIELE	R RE M32
Production cannot start before February 2016. Will delay a little bit	
D.3.2. FTK first production commissioned	Pub PU M34 conference
IEEE TNS & NSS related to infrastructures and prototypes commissioned	
D.5.3. Performances of natural still image processing	Calliope Pub PU M34 conference Vienna,
D.6.3. Optimized power supplies and their characterization	Calderini Pub PU M34 conference
D.1.3. SLP1 prototype constructed at PRIELE	TNS Christos Pub PU M36 conference
The last ones of 2016-2017	

D.4.6.	SLP1 detailed simulation	Internal document	R	RE	Christos	M38	Mar.
D.5.4.	Results of tests on movie processing	3-d reconstruction?	Pub	PU	Calliope	M40	May
D.4.7.	Test Vectors for the SLP1 based FTK	Internal document	R	RE	Christos	M42	July
D.1.4.	2 nd FTK production assembled at PRIELE		R	RE	Panagiotis	M42	July
D.3.3.	FTK second production commissioned	NSS - 2016	Pub	PU	Virginia?	M46	Nov.
D.2.6	SLP1 fully integrated	TNS?	Pub	PU	Christos	M48	Jan.
D.5.5.	Results of tests on medical image processing	NSS - 2016	Pub	PU	Calliope	M48	Jan.

The Milestones for 2015 are:

M.4.2. Trigger_performance_ok	UniPisa M26 Predicted trigger performances	OK
M.4.3. SLP1 architecture review	UniPisa M30 Approval of SLP1 architecture in Atlas	IMPOSSIBLE
M.1.3. 1 st production ok at Priele	PRIELE M32 1 st production validated at PRIELE	DELAYED
M.5.1. HW still-image processor ok	UniPisa M34 HW still-image processor runs flawlessly	~OK
M.3.2. 1 st production ok at Cern	CERN M36 1 st production runs flawlessly in Atlas	DELAYED
M.1.4. SLP1 prototype ok at Priele	PRIELE M36 SLP1 prototype validated at PRIELE	~OK
M.6.1 CAEN PS Atlas review	CNRS M32 decided to be done before February - @ beginning of December we will note the date.	

The last Milestones in 2016-2017: second production → first production

M.5.2.	Natural movies processed by AM	UniPisa MAY	M40	AM filtering of natural movies ok
M.5.3.	Medical images for AM	UniPisa JULY	M42	Procurement of medical image data
M.1.5.	2 nd production ok at Priele	PRIELE JULY	M42	2 nd production validated at PRIELE
M.3.3.	2 nd production ok at Cern	CERN JAN	M48	2 nd production runs flawlessly in Atlas
M.2.5.	SLP1 ok at Caen	CAEN JAN	M48	SLP1-based FTK running flawlessly

(a) Reminder of the plan for papers on peer review Journals for 2015:

- (1) AMBSLP + LAMB + AMchip05 → AMsystem complete; when it will work correctly; Paola Almost ready “The Associative Memory System for the ATLAS Experiment”
- (2) AMB design & test → pub. for PHD students (Pierluigi, Saverio, Nicolo’, Calliope) → **DONE**
“Highly Parallelized Pattern Matching Execution for Event Real-Time Reconstruction” --submitted to TNS
- (3) Sotiropoulou TNS paper for PHD → **DONE**
- (4) Gentsos paper for PHD → to be written when design complete and tested **TO BE DONE**
- (5) Cooling tests and T-simulation; Infrastructures → **It is part of (1)**
- (6) AMBSLP monitoring/Firmware description → **TO BE DONE**
- (7) Fast Tracker for Hadron Collider Experiments - FP7-PEOPLE-2012-IAPP: Grant Agreement Number 324318 - FTK-IAPP Consortium - submitted to DATE – NOT ACCEPTED

(2) OUTREACH – TOK – MILESTONES & DELIVERABLES

Milestones: results verification of Open Days, Workshop day, Summer Schools results:

Open Days: very successful →

- (1) Pisa: (a) research night & (b) Congressino of Department of Physics
- (2) LPNHE: fete de la science in Paris
- (3) AUTH: during “University on Sundays” (3 days in May) in Tessaaloniki

Workshops days: very successful → Imaging session at Hipeak CSW week in Milan

School: very successful → 23 March 2015 in Tessaaloniki. Students from the private University Mediterranean College, 1st and 2nd year in Computer Science. (a) Lectures, (b) Measurements using event displays, visit to the high energy physics Labs.

World wide web site for dissemination → Donati presented future update plans to the site

(3) Soft Trainings

- (1) Intellectual Property: followed the EU web-seminar <https://www.iprhelpdesk.eu/webinars> and taken a contact with the company Hoffmann Eitle | Patent- und Rechtsanwälte PartmbB

The company provided a full description of possible actions and their costs for patents (see e-mail 11 February 2015).

(2) Photonics: meeting (January 9) with Marco Romagnoli from Sant'Anna, Pisa

(3) ETHICS - MEDICAL IMAGING: meeting (June-11) with Cerello, Retico,

Buonincontri: see agenda

<https://agenda.infn.it/conferenceDisplay.py?confId=9777>

(4) SCIENTIFIC ENGLISH - course in Pisa from February to end of May (2 hours/week)

(5) MATHEMATICA → use of the software tool Mathematica, for researchers involved in Work Package 5. May 2015, teacher Mauro Dell'Orso

(6) CAD ALTIUM → Teacher A. Sakellariou to the electronics group in Pisa.

(7) GENDER ISSUES **next year 2016 during Master Class → electronics for young women only**

(8) *Next FTK Workshop, Training, Open day, Workshop for the public & IAPP school*

The outreach schedule is presented to assign the events of the next year.

<https://agenda.infn.it/getFile.py/access?contribId=2&resId=0&materialId=1&confId=9007>

We have decided to have the GA-EB, the FTK workshop (open to external researchers) and the training all at CERN (Geneva), collecting all the events in the same week at the beginning of February (3-5).

Open Days will be done like in 2015, at Pisa, LPNHE and AUTH.

The school will probably be again in Pisa with FPGA lessons and laboratory with evaluation boards.