

(0) Secondments / Declaration of Conformities

(1) Conference - Papers

(2) Deliverable & Milestones –
2016 summary & next steps

(3) Outreach activities, trainings, schools

(5) Next GA, EB and trainings

Secondments/Recruitments

[Sending Institution] [Country] [Comm. sector Y/N]	Year 4															
	9 33	10 34	11 35	12 36	1 37	2 38	3 39	4 40	5 41	6 42	7 43	8 44	9 45	10 46	11 47	12 48
[UniPisa], [N] Plendibene		4							4							
[UniPisa], M. Plendibene				14	12	14	14									
[UniPisa], S. Donati																
[AUTH] C. Gentsos	4	5	6													
[AUTH], C.L. Sotiropoulou																
[AUTH] I. Maznas								1	2	3						
[PRIELE], Dimas																
[PRIELE], Dimas																
[PRIELE], Sakellariou																
[PRIELE], Paris		1	2													
[PRIELE], K. Mermikil		1	2													
[PRIELE], Mermikil																
[PRIELE], Mermikil								4								
Naoki Kimura	17	18	19	20	21	22	23	24								
Virginia Greco	2	3	4	5	6	7	8	9	10	11	12					
[AUTH], Kordas									2	4						
[AUTH], Sampsonidis									2	2						
[AUTH], Gkaitatzis		1	2	3	4											
[AUTH], Gentsos																
[AUTH], Sotiropoulou																
[CNRS], Crescidi										2		5				
[CAEN], Crescidi Jovane																
[Prisma], P. Kalaitzidis										3	4					
Guido Volpi																
Sotiropoulou	10	11	12	13	14	15	16	17	18	19	20					
[CNRS], Calderini																
Roberto Beccherle																

Prisma:

1. Maznas **May-August**

AUTH:

1. Paris **Sept-Nov - NEW**

CAEN:

Deleted Crescidi/Piendibene

CERN:

1. Mermikli **April ok**
2. Kalaitzidis **July-Aug ok**
3. Kalaitzidis **End-Nov/Jan- NEW**

REMEMEBER:
DECLARATIONs OF
CONFORMITY

GA-EB decision for future changes at the Gantt Chart – to be proposed to PO

- 4 months from M. Piendibene and 2 months for F. Crescioli secondments cannot be implemented
- We propose to change in the following way:
 1. 1 months goes for Maznas AUTH → Priele
 2. 3 months go for Paris Priele → AUTH
 3. 2 months go to Kalaitzides PRIELE → CERN

UNIPisa will get the relative amount of Management funds
(10% of the costs of those secondments)

Secondment Change: Money computation

	Living Allowance/month for different type of contract					
	ER A	ESR A	MER A	ER B	ESR B	MER B
living Allowance/ month	4875,00	3166,67	7291,67	2437,5	1583,33	3645,83333
corrected Greece	4621,50	3002,00	6912,50	2310,75	1501,00	3456,25
corrected Italy	5196,75	3375,67	7772,92	2598,38	1687,83	3886,46
corrected CERN	5357,63	3480,17	8013,54	2678,81	1740,08	4006,77
	Mobility/month					
	Married	Not-Married				
Mobility/month	1000,00	700,00				
corrected Greece	948,00	663,60				
corrected Italy	1066,00	746,20				
corrected CERN	1099,00	769,30				
corrected Paris	1161,00					

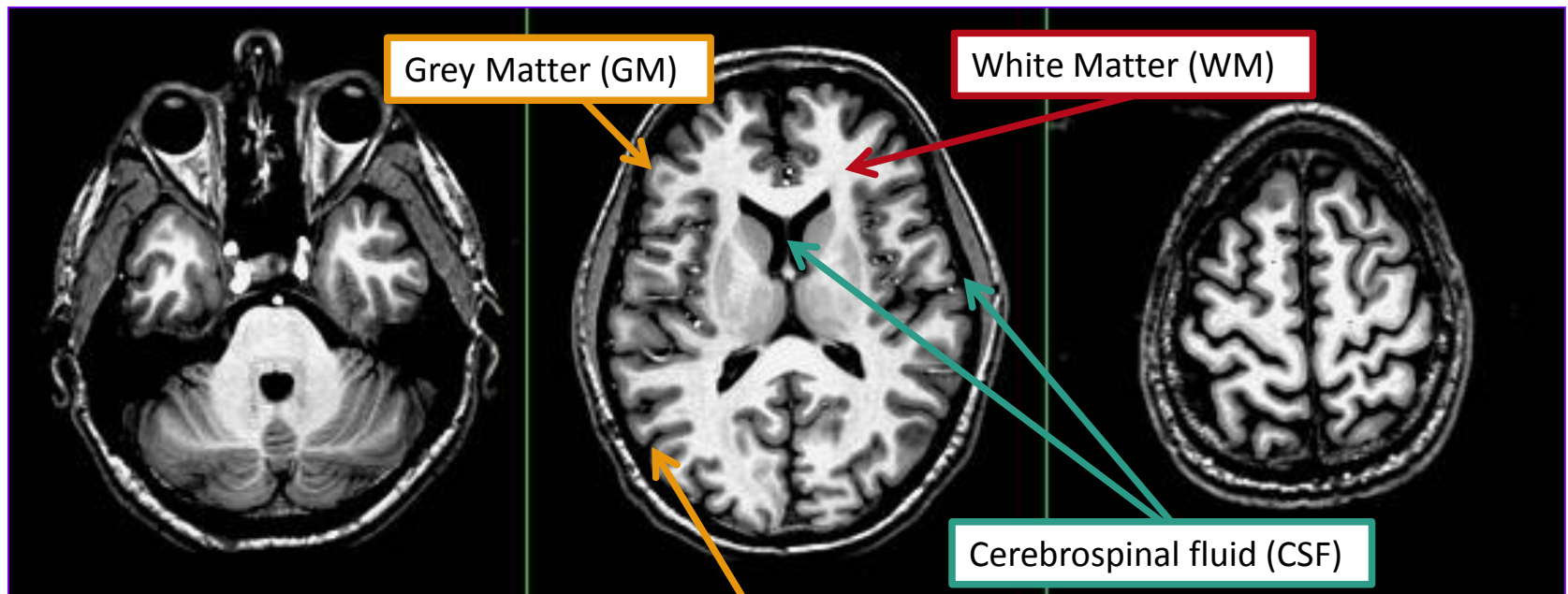
-2205,13	Marco (MERB)-->ERA from Prisma	3 mesi
3239	Calliope (ERA) --> Ioannis (ESRA)	2 mesi
884,46	Marco (MERB)--> Ioannis (ESRA)	1 mese
-4925,10	Francesco (ERB marr.)-->Panagiotis (ERA not marr.)	2 mesi
-4084,62	Petrucci (MERB marr.) --> Panagiotis (ERA not marr.)	4 mesi
3239	Panajotis-->Konstantina	2 mesi
3322,366667	Kostas (MERB marr.)-->Akis (ESRA not marr.)	4 mesi
1675,108333	SUM	

Recent Papers

- [Highly Parallelized Pattern Matching Execution for Event Real-Time Reconstruction](#)
-- S. Citraro, N. Biesuz, P. Giannetti, P. Luciano, H. Nasimi, M. Piendibene, C.-L. Sotiropoulou, Member, IEEE and G. Volpi -- **published in April on TNS** -
Paper on Amboard_v3, signed by highly contributing researchers (Annovi added recently)
- [Fast Tracker for Hadron Collider Experiments](#) - FP7-PEOPLE-2012-IAPP: Grant Agreement Number 324318 - FTK-IAPP Consortium - **submitted to DATE – not published but our project has been invited to DATE (Booth + one talk by Calliope)**
- [Highly Parallelized Pattern Matching Execution for the ATLAS Experiment](#) signed by all the collaborators that worked on the AM boards (HW-SW) —**submitted to ATLAS & TNS for Real Time**
- [A coprocessor for the Fast Tracker Simulation](#) signed by Christos and people working on the SLP1 - **submitted to Real Time 2016 - plan to publish on TNS for Real Time**
- [Brain Emulation for Image Processing](#) signed by people working on SW and HW for image processing - **submitted to Real Time 2016 - plan to publish on TNS for Real Time**
- [High Performance Embedded System for Real-Time Pattern Matching](#) - signed by people working on HW for image - **VCI proceeding**
- [Performances of a Real-time Multipurpose 2 Dimensional Clustering Algorithm Developed for the ATLAS Experiment](#) - signed by people working on 2D clustering - **Mocast proceeding**
- [FTK](#) - signed by all FTK people - **Mocast proceeding**

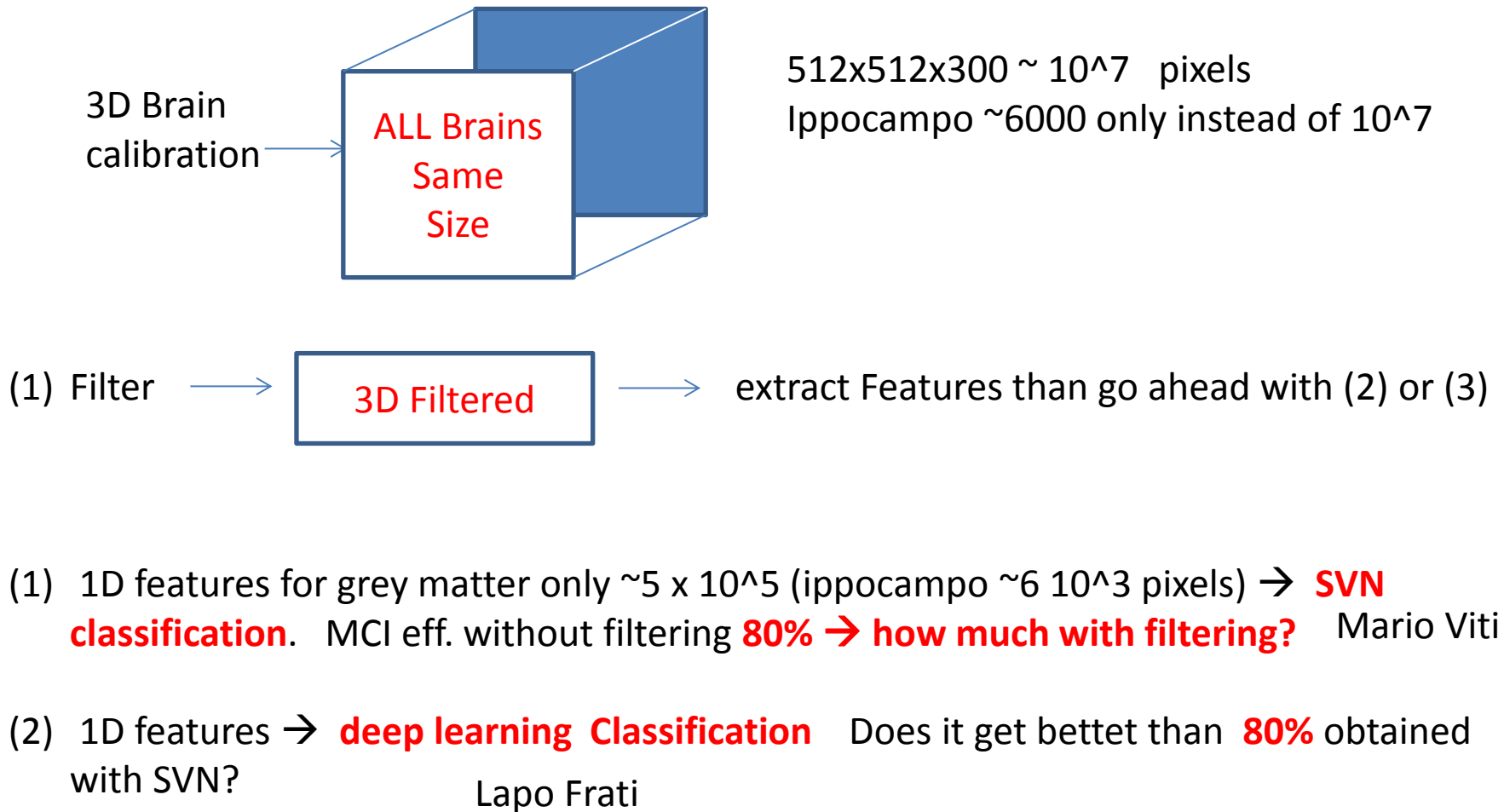
Interesting collaboration with students from computing science and Alessandra Retico for MRI imaging

Axial slices of a human head with spatial resolution of about 1 mm³



Grey Matter (GM) cortex can be followed and cortical thickness can be evaluated to investigate GM involvement in pathological conditions.

PLAN



2016 Program - Deliverables

TWO more Deliverables before February

D.6.3.	Optimized power supplies and their characterization	Pub	PU	Calderini	M34	Nov.
D.1.3.	SLP1 prototype constructed at PRIELE	Pub	PU	Christos	M36	Jan.
D.4.6.	SLP1 detailed simulation	R	RE	Christos-Paola	M38	Mar.
D.5.4.	Results of tests on movie processing	Pub	PU	Calliope-Paola	M40	May
D.4.7.	Test Vectors for the SLP1 based FTK	R	RE	Paola	M42	July
D.1.4.	2 nd FTK production assembled at PRIELE	R	RE	Panagiotis	M42	July
D.3.3.	FTK second production commissioned	Pub	PU		M46	Nov.
D.2.6.	SLP1 fully integrated	Pub	PU	Christos	M48	Jan.
D.5.5.	Results of tests on medical image processing	Pub	PU	Calliope	M48	Jan.

2015 Program – Deliverables sent in Feb

D.4.4. Trigger table for demonstrator with performance prediction https://cds.cern.ch/record/1755840/files/ATL-DAQ-INT-2014-005.pdf	Pub PU M25	Public Note ATLAS Public Note
D.5.1. Infrastructure at CAEN for Image Processing	R RE M26	PAOLA
D.4.5 SLP1 architecture simulation Summary IEEE Real Time-Paola	Pub PU M28 - Paper for	Christos the
D.5.2. Software & firmware ready for training and image processing Summary IEEE Real Time-Paola	R RE M30	PAOLA

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

D.1.2. 1 st FTK production assembled at PRIELE	TNS approved	R RE M32
D.3.2. FTK first production commissioned Summary IEEE Real Time	Pub PU M34 conference	Paola Pierluigi/
D.5.3. Performances of natural still image processing poster Vienna	Pub PU M34 conference	Calliope

2015 Program - Milestones

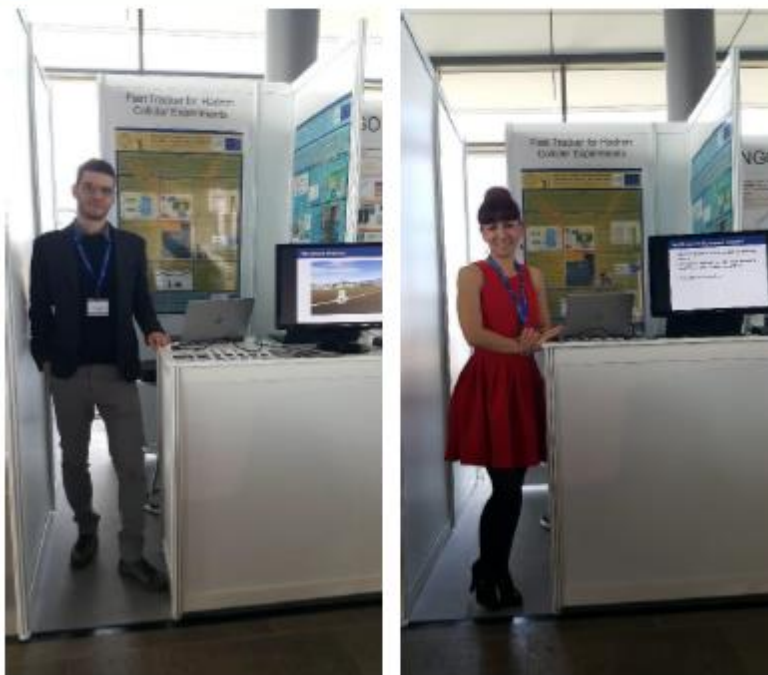
- **M.4.2.** Trigger_performance_ok **UniPisa M26** Predicted trigger performances OK
 - **M.4.3.** SLP1 architecture review **UniPisa M30** Approval of SLP1 architecture in Atlas – **IMPOSSIBLE**
 - **M.1.3.** 1° production ok at Priele **PRIELE M32** 1° production SLP2 validated at PRIELE - **DELAYED**
 - **M.1.4.** SLP1 prototype ok at Priele **PRIELE M36** SLP1 prototype validated at PRIELE OK
 - **M.5.1.** HW still-image processor ok **UniPisa M34** HW still-image processor runs flawlessly OK
 - **M.3.2.** 1° production ok at Cern **CERN M36** 1° production runs flawlessly in Atlas - **DELAYED**
 - **M.6.1.** CAEN PS Atlas review **CNRS M32** CAEN power supply Atlas review - **DELAYED**
-

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

Participation to DATE

- A European Project Booth
- Together with other projects in the same thematic area
- With organizations and funding agencies like HiPEAC, TETRACOM and EuroLAB 4
- With companies and institutes such as Xilinx, Altera, T-Telecom, X-Fab, Europractice, Microtest, Elsevier etc.

Our booth



- Two posters
- A presentation in loop presenting ATLAS, FTK and our research poster
- Brochures and professional cards
- And of course two researchers.. 😊

OUTREACH-TOK MILESTONES & Deliverables part of FEB report

M.7.1.-M.7.3.	Open Days results verification	AUTH	M8, M20, M32 Sept.
M.7.4. –M.7.6.	WorkS. days results verification	AUTH	M6, M18, M30 JULY
M.7.7. –M.7.9.	Summer schools results	AUTH	M7, M19, M31 August

Kostas/Paola/Francesco

D.7.1. IAPP project open days **UNIPI/LPNHE/AUTH** R PU M7, M19, **M31**, M43 **August**

~~D.7.2. Workshop days (for medical imag people) R CERN~~ PU M5, M17, **M29**, M41 **June**

D.7.3. Summer school weeks (**AUTH in lab**) R Kostas PU M6, M18, **M30**, M42 **July**

D.7.4 D.8.3 World wide web site for dissemination R PU M6, M18, **M30**, M48 **July**

Status of Web site Kostas/Paola/Simone

D.8.1. FTK Workshops (**@LPNHE**) Francesco R RE **M1, M13, M36**, M46 **March**

D.8.2. Trainings (**@LPNHE. Now, last is CERN**)R Francesco RE **M1, M5, M9, M19, M26**, M47

SOFT TRAININGS:

Intellectual Property <https://www.iprhelphdesk.eu/webinars>

ETHICS - MEDICAL IMAGING Paola

SCIENTIFIC ENGLISH Paola

GENDER ISSUES → **in March during Master Class → very successful**

MATHEMATICA Mauro

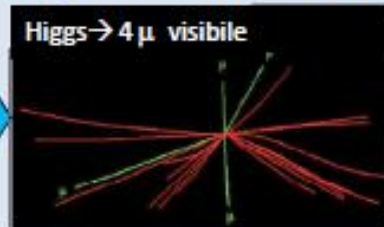
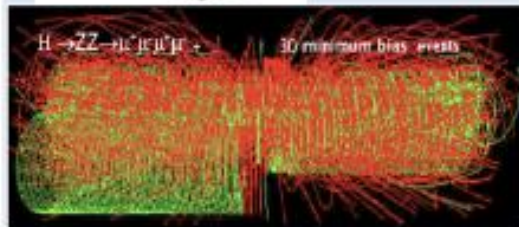
CAD ALTIUM Andreas

**FTK session at Hipeak
CSW in Milan September**

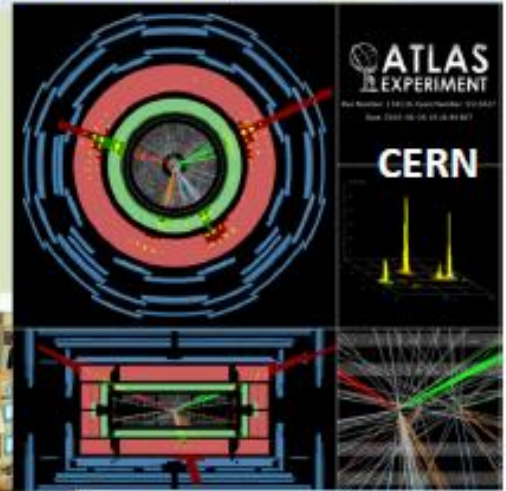
LE RAGAZZE E LA SCIENZA: INCORAGGIAMOLE AD INTRAPRENDERE L'AVVENTURA

2 MARZO 2016, ORE 9 EDIFICIO C, STANZA 131,
LARGO B. PONTECORVO 3, PISA

FP7 project FTK GA 324318: <http://ftk-iapp.physics.auth.gr/>



Virginia Greco:
Lenti Enormi per
Oggetti
Piccolissimi



Calliope-Louisa Sotiropoulou:

High Performance
Computing



FTK Marie Curie Fellow



FTK Marie Curie Fellow

Fermilab, Chicago





PROGRAM

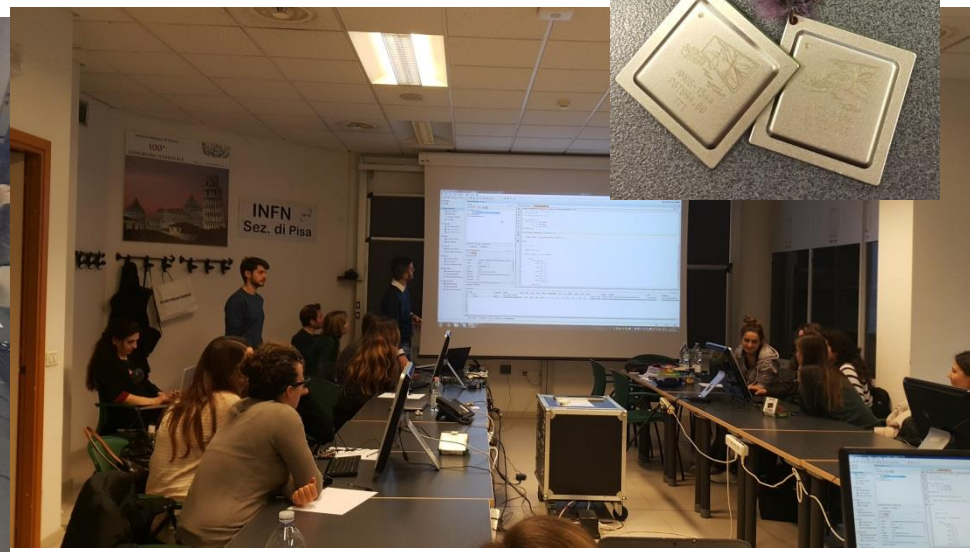
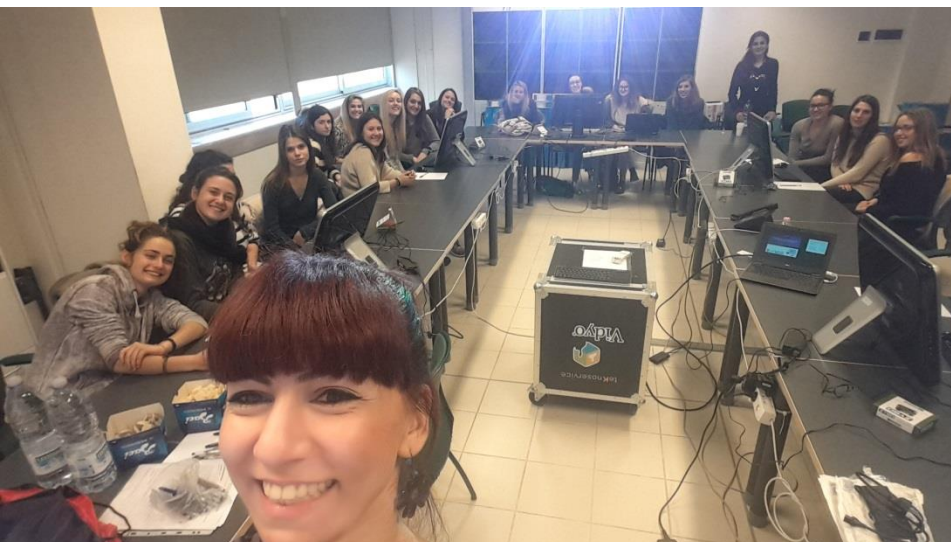
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**2 MARZO 2016, ORE 9:30 EDIFICIO C, STANZA 131,
LARGO B. PONTECORVO 3, PISA**

FP7 project FTK GA 324318: <http://ftk-iapp.physics.auth.gr/>

Sezione INFN di Pisa Sala Seminari 131 Piano Terra Edificio C

- | | |
|--|---|
| 09:30-09:40 | Saluto e ringraziamento per la partecipazione
Dott.ssa Paola Giannetti, INFN Sezione di Pisa, responsabile progetto FTK |
| 09:40-10:25 | High Performance Computing: Il mio viaggio dalla Fisica alla Elettronica
Dott.ssa Calliope-Louisa Sotiropoulou (Pisa) |
| 10:25-11:15 | Lenti Enormi per Oggetti Piccolissimi: Il mio viaggio dall'Elettronica alla Fisica
Dott.ssa Virginia Greco (CERN) |
| 11:15-12:00 | Le ragazze e la scienza: INCORAGGIAMOLE ad Intraprendere l'avventura
Prof.ssa Patrizia Colella (Lecce) |
| 12:00-14:00 | Pranzo e incontro con i ricercatori del progetto europeo |
| Sezione INFN di Pisa Sala 250 Primo Piano Edificio C | |
| 14:00-15:00 | Presentazione esperienza di laboratorio di elettronica |
| Sezione INFN di Pisa Laboratori di elettronica piano -2 | |
| 15:00-16:00 | Sessione di Laboratorio di elettronica |



OUTREACH - FTK workshops - Trainings SCHEDULE

[illegible]

ALL DONE IN PISA first year

AUTH

Last March
at LPNHE!

School In AUTH

**NEXT Summer
Training
at CERN!**

FTK Workshop at CERN WHEN ?

WHEN?
WHERE?

FTK session
@ Hipeak CSW in Milan

- IAPP Open Days: Pisa/AUTH/Paris → like last year
- Workshop Day → Mocast again? Hipeak CSW? Meeting at CERN with researchers working on imaging?
- School: could be the day “le ragazze e la scienza” or a VHDL school.

NEXT EB, GA meetings proposal

- Today first meeting of the year for GA, EB.
- Next EB can be in July at CERN. I propose it will be in coincidence with CERN trainings and FTK workshop.

Do you agree?

**CONCLUSIONS: also the forth year
looks ok
Let's hope in good papers this year**

Nice group!
Nice collaboration

