DRAFT AGENDA

2 nd TRAINING SCHOOL BY COST 804 ACTION ON

"ENERGY EFFICIENCY IN LARGE SCALE DISTRIBUTED SYSTEMS"

Dates: 24 (09h), 25, 26, and 27 April (13h) 2012

Location: University of the Balearic Islands, Palma de Majorca, Balearic Islands, Spain

Local organizer: Assoc. Prof. Carlos JUIZ, Computer Science Dept. (Anselm Turmeda Building), University of Balearic Islands, Carretera de Valldemossa km 7,5, ESP 07122 Palma de Mallorca Tel: +34-971-172048 Email: cjuiz@uib.es

Scientific Training school coordinators:

a) Prof. L-F Pau, Copenhagen Business School, Denmark email: lpau@nypost.dk

b) Prof Paul Borza, University of Transylvania, Romania email: paul.borza@yahoo.com

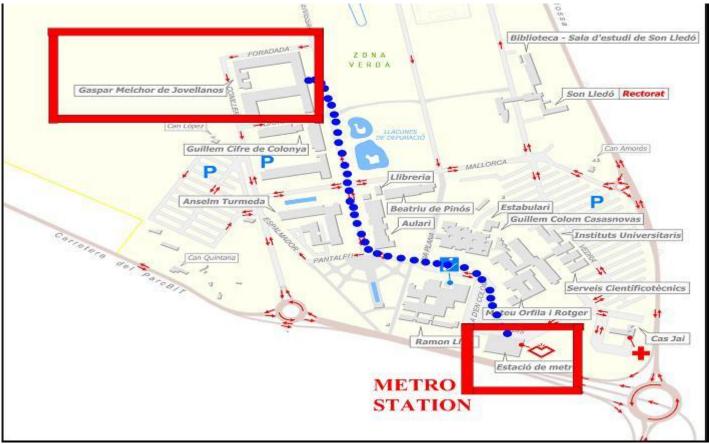
1. LOCATION

All lectures, panels etc. will be held at:

Jovellanos Building, Balearic Island University, (http://www.uib.es/lauib/localitzacio/Campus/Edificis/)

http://maps.google.es/?ll=39.639467,2.644352&spn=0.002388,0.004823&t=h&z=18&vpsrc=6

The university and the city center are connected by metro (15 minutes and 1 euro) and by bus (20 minutes and 1, 5 euros), with high frequencies.



2. TRAINING SCHOOL WEB SITES

- 1 st COST 804 Training school, Brasov, Romania (2011) <u>http://www.ens-lyon.fr/LIP/RESO/COST-TrainingSchool-2011/</u> Trainees are urged to study there the lectures <u>not</u> presented in the 2 nd Training school.
- 2) 2 nd COST 804 Training school, Palma de Majorca, Spain (2012) http:// cost804trainingschool.uib.es/

3. GOAL

The COST 804 training school aims at presenting to European early stage researchers (as defined under COST rules, less than PhD+ 8 years' experience) a comprehensive multidisciplinary state of the art relevant to the field of energy efficiency in distributed networks. It also aims at enabling the networking of these researchers amongst themselves and with the COST 804 community <u>www.cost804.org</u>. The participants should expect to get an overview of the field represented by the COST 804 Action, and detailed knowledge supplementing their focussed research topics. The Training school's scope is to address energy efficiency in design, modeling and operations, starting from the hardware/software level, to the functional level, to operations and adaptation, and finally to adoption of the proposed measures, in a wide diversity of networks with associated facilities. Will be highlighted the main approaches, the state of the art in research and industry, and the performance/ QoS / cost trade-offs.

4. RULES FOR TRAINEES

- The rules applying for COST supported Training schools are given in the COST Vademecum documents downloadable from: http://www.cost.esf.org/participate/guidelines.
- All trainees and trainers must have in advance registered on the e-COST system, and provided their banking details.
- Individual grants awarded to trainees: it is the amount notified each individual trainee by the COST 804 Grant holder. The grants awarded to the trainees may be less than their initial grant requests. A high level of commitment to the Training course is expected via the eventual individual partial funding of the participation by the mother institutions of the trainees
- General guideline: the individual grants are be based on the cheapest travel arrangement from home institution in COST 804 participating Country, to Palma de Majorca, with arrival on day before start, and departure on day of Training school ending (except if written evidence is provided that no connection is possible same day after Training school ends, in which case one night hotel cost will have been included in the grant awarded).
- If trainees intend to stay longer than the 4 nights needed for the training school (and with the only exception as explained above), they can do so at own cost, but flight/boat price increases due to these changes will not be eligible for the COST grant.
- All trainers or lecturers will have to pay in full all their meals themselves.
- Attendance by trainees receiving a grant is *mandatory to all lectures and days*, and attendance sheets must be signed each day (they must be remitted to COST Secretariat prior to payment of the grants). Failure to comply will lead to a reduction in grant award.

• Each participant (trainee, lecturer) must settle in person their full bill at the hotel; each participant must keep all original receipts for travel expenses and submit copies with the COST reimbursement form.

• Attendees needing a visa to enter Spain will have had to contact well in advance Local Host for the needed documents regarding the Training school.

• Trainees should note that all lecture notes are copyrighted by each lecturer and/or their employers; reproduction and commercial or academic use is thus not allowed unless agreements are made.

5. DELIVERABLE

Each set of lectures will have a time window in which the trainees, interacting with the trainers, will be asked to identify some research questions and approaches (with their proponents), which will be minuted to become a deliverable to COST 804 from the Training school. Two volunteers will be asked to write these short minutes for electronic distribution to all attendees at the end of the Training school. This document will also be attached to the report to the COST Secretariat about the Training school.

6. AGENDA

Each day from 24 April morning to 27 April mid-day, all registered COST participants (trainees, lecturers) MUST sign the attendance sheet prepared by Local organizer. Failure to comply will imply a reduction in grant awarded or in reimbursement by COST

<u>All the lectures will be help in room AA06 of the Gaspar de Jovellanos Building, except for 24th April from 16:30 to 19:00, when the room will be the AA04 (the change of the room will be done during the coffee break.</u>

DATE	TIME INTERVAL	ACTIVITY	MAIN PARTICIPANTS	REMARKS
23 April		Check-in at hotel	All non-local participants	Complete police and payment card registration; all guests at hotel must pay the full bills themselves
24 April	09:00- 09:15	Welcome / Logistics/ Distribution of COST reimbursement forms/ explanation of mandatory attendance sheet signature / WiFi log-in	C. JUIZ and UIB	
	09:15- 09:45	 Course overview Presentations of lecturers Introduction of COST 804 Summary of deliverable to be prepared by participants; candidate rapporteur selection 	L-F Pau, P. Borza All lecturers C. Juiz, L-F Pau, P. Borza L-F Pau, P. Borza	
	09 :45- 10 :45	Short presentations by all trainees	All trainees	Max 2 min / participant (name, institution, background, research interests, give/take)
	10:45- 11:15	Coffee break		
	11:15- 13:00	BACKGROUNDER ON GREEN ITC TECHNOLOGIES (I) Last 15 min: identify key research questions	L-F Pau	Rapporteurs of deliverable to produce key findings
	13:00-	Lunch		On site, to be paid by each participant

	14:30			
	14:30- 16:00	SMART GRIDS AND ENERGY EFFICIENT ICT (I) Last 15 min: identify key research questions	P. Borza	Rapporteurs of deliverable to produce key findings
	16:00- 16:30	Coffee break		
	16:30- 17:30	BACKGROUNDER ON GREEN ITC TECHNOLOGIES (II)	L-F Pau	
	17:30- 19:00	PANEL (A): How to migrate end users to adopting Green ITC technologies	Lecturers and Trainees	Rapporteurs of deliverable to produce key findings
25 April	08:30- 09:00	Trainees to turn in completed COST reimbursement forms, plus copies of travel receipts (I)	UIB Secretary	All trainees must produce copies of all travel receipts
	09:00- 10:45	ALGORITHMIC TECHNIQUES FOR REDUCING ENERGY CONSUMPTION OF COMMERCIAL WEB SEARCH ENGINES (I) Last 15 min: identify key research questions	B. Cambazoglu	Rapporteurs of deliverable to produce key findings
	10-45- 11:15	Coffee break		
	11- 15:13:00	SMART GRIDS AND ENERGY EFFICIENT ICT (II) Last 15 min: identify key research questions	P. Borza	Rapporteurs of deliverable to produce key findings

	13:00-	Lunch		On site, to be paid by each participant
	14:30			
	14:30-	ALGORITHMIC TECHNIQUES FOR REDUCING	B. Cambazoglu	Rapporteurs of deliverable to produce key findings
	16:00	ENERGY CONSUMPTION OF COMMERCIAL WEB		
		SEARCH ENGINES (II)		
		Last 15 min: identify key research questions		
	16:00-	Coffee Break		
	16:30			
	16:30-	BACKGROUNDER ON GREEN ITC TECHNOLOGIES	L-F Pau	Rapporteurs of deliverable to produce key findings
	17:30	(111)		
		Last 5 min: identify key research questions		
	17:30-	PANEL (B): How should computing industry	Lecturers and	Rapporteurs of deliverable to produce key findings
	19:00	prioritize and plan over time migration to Green	Trainees	
		Computing?	L-F Pau, P. Borza	
		Short briefing on preparation of Trainee	,	
		presentations next day		
26	08:30-	Trainees to turn in completed COST	UIB Secretary	All trainees must produce copies of all travel receipts
April	09:00	reimbursement forms, plus copies of		
		travel receipts (II)		
		Lecturers to turn in completed COST		
		reimbursement forms, plus copies of		
		travel receipts		

09:00-	ENERGY EFFICIENCY (EE) OVER WIRED NETWORKS	A.E. García	Rapporteurs of deliverable to produce key findings
10:45	(1)		
	Last 15 min: identify key research questions		
10:45-	Coffee break		
11:15			
11:15-	ENERGY CONSERVATION IN WIRELESS SENSOR	G. Anastasi	Rapporteurs of deliverable to produce key findings
13:00	NETWORKS (I)		
	Last 15 min: identify key research questions		
13:00-	Lunch		On site, to be paid by each participant
14:30			
14:30-	ENERGY and EMISSIONS SAVINGS IN PUBLIC	L-F Pau	Rapporteurs of deliverable to produce key findings
16:00	WIRELESS NETWORKS (I)		
	Last 15 min: identify key research questions		
16:00-	Coffee break		
16:30			
16:30-	ENERGY EFFICIENCY (EE) OVER WIRED NETWORKS	A.E. García	Rapporteurs of deliverable to produce key findings
17:30	(11)		
	Last 5 min: identify key research questions		
17:30-	PANEL (C): TRAINEE PRESENTATIONS	All trainees	2 slides (max), max 5 mn per trainee (strictly enforced, incl.
20:00			feedback) to present own research issue, how Green ITC is
			exactly embedded in it, and expected energy reduction impact

27	08:30-	Check-out from hotel	All participants	
April	09:00	 Problem solving around COST forms and evidence Information on transfer to airport / 	Local host and coordinators Local host	
		harbor		
	09:00- 10:30	ENERGY CONSERVATION IN WIRELESS SENSOR NETWORKS (II)	G. Anastasi	Rapporteurs of deliverable to produce key findings
		Last 15 min: identify key research questions		
	10:30- 11:00	Coffee break		
	11:00- 12:00	Trade-off and selection methodologies including business and user behaviours. Demonstration of simplified version of tool calculating energy consumption and emissions in public wireless networks	L-F Pau	The presentation will be of a simplified version of unique industrial tool whereby mobile network operators design 3G/LTE wireless networks for best energy efficiency, and run these operations with minimal on-going energy consumption .It serves as a live illustration of trade-offs in an industrial setting. The full tool cannot be demonstrated as it involves heavy computations and a high performance computing environment
	12:00- 12:45	PANEL (D) : Training school evaluation	All trainees	
	12:45- 13:00	Information on uploaded slidesClosing of Training school	C. Juiz and Organizers	

03	Rapporteurs send draft Deliverable to	Rapporteurs,	
May	Coordinators and Lecturers	Coordinators,	
		Lecturers	
07	Coordinators send final deliverable for posting on	Coordinators	
May	Training school Web site and to COST 804		

7. EMAILS OF LECTURERS

ANASTASI	Guiseppe	Pisa, Italy	giuseppe.anastasi@iet.unipi.it
CAMBAZOGLU	Berkant	Barcelona, Spain	<u>barla@yahoo-inc.com</u>
BORZA	Paul	Brasov, Romania	paul.borza@yahoo.com
PAU	Louis-François	Copenhagen, etc.	<u>lpau@nypost.dk</u>
GARCIA	Alberto	Santander, Spain	agarcia@tlmat.unican.es