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COST2100 / CONET / NEWCOM++ Training School and Workshop on “Cooperating Objects and Wireless Sensor Networks”

Bologna, May 10-13, 2010

Aula Prodi, San Giovanni in Monte

<http://www.complexosgm.unibo.it/ComplessoSGM/AulaProdi/default.htm>

This event is organised under the auspices of FP7 and COST/ESF Programmes of the European Commission, by three projects: COST2100 (the Action on Pervasive Mobile and Ambient Wireless Communications), CONET (the Cooperating Objects Network of Excellence) and NEWCOM++ (the Network of Excellence in Wireless Communications). The event will include:

- **The COST2100 / CONET / NEWCOM++ Training School – May 10-12**
- **The CONET / NEWCOM++ Workshop – May 12-13**

For any information see www.cost2100.org or contact Miss Silvia Zampese, secretary@cost2100.org

Training School

In two days and a half, the school will address the broad topic of cooperating objects and wireless sensor networks, under an inter-disciplinary approach: the lectures will span from fundamentals of radio channels, embedded systems and network aspects, to more applicative domains in the field of body area networks (BANs), environmental monitoring and energy control in buildings: applications greatly emphasised in the next FP7 Workprogramme for ICT, 2011-2012. Ten lectures will be provided, with speakers from academia, research centres and industries participating to either COST2100, CONET or NEWCOM++. The school is targeted at PhD students, Early Stage Researchers both from academia and industry. However, the lectures can be attended by anyone willing to participate (e.g. University graduate students, or senior researchers). PhD students will be allowed to get credits (two, according to ECTS).

Programme: see next page

Organisers: L. Clavier (University of Lille, FR), P. J. Marron (University of Duisburg-Essen, DE), C. Oestges (Catholic University of Louvain, BE), R. Verdone (University of Bologna, IT).

Registration fee: 150 EUR, including: coffees, lunches, cocktail, printouts of slides

The first thirty COST2100 participants who will register are entitled to receive a grant of up to 500 EUR.

Registration deadline: May 2nd, through www.cost2100.org (under Training Schools → 2010)

Workshop

In one day and a half, the workshop will provide twelve high quality scientific talks from researchers of both CONET and NEWCOM++, addressing the various topics of cooperating objects and wireless sensor networks under both a theoretical and practical perspective. Both long- and short-to-medium-term research issues are addressed. A keynote speech and some demos will complete the programme. Printouts of the slides will be made available to attendees. The speakers are not requested to provide a technical paper, but are invited to report on the latest advancements of their research in the field. The workshop is targeted at PhD students, and researchers both from academia and industry.

Programme: see next page

Organisers: P. J. Marron (University of Duisburg-Essen, DE), S. Palazzo (Univ. of Catania, IT), R. Verdone (University of Bologna, IT).

Registration fee: 120 EUR, including: coffee, lunches, dinner, printouts of slides

Registration deadline: May 2nd, through www.cost2100.org (under Training Schools → 2010)

Registration fee (both events): 200 EUR, including: coffees, lunches, cocktail, dinner, printouts of slides

Training School - Programme

Day One – Monday, May 10

9h00	Welcome by Pedro J. Marron & Roberto Verdone		
9h30-11h00	<i>"Essentials of the Radio Channel"</i>	A. Sibille	ENSTA, FR
11h30-13h00	<i>"Radio Channel and MAC for BANs"</i>	R. D'Errico	CEA-LETI, FR
14h30-16h00	<i>"The IEEE 802.15.4 Standard: MAC and Topology Aspects"</i>	C. Buratti	Un. Bologna, IT
16h30-18h00	<i>"IP-Based Low-Power WSNs"</i>	A. Dunkels	SICS, SE
18h30	Welcome Cocktail		

Day Two – Tuesday, May 11

9h00-10h30	<i>"Fundamentals of Localization in WSNs"</i>	D. Dardari	Un. Bologna, IT
11h00-12h30	<i>"Decentr. Estimation with WSNs: Where Signal Proc. and Inf. Th. Meet"</i>	C. Anton	CTTC, ES
14h00-15h30	<i>"Interfering and Cooperating in WSNs"</i>	L. Clavier	Un. Lille, FR
16h00-17h30	<i>"Wireless Sensor Applications for Smart Grids and BANs"</i>	C. Borean / R. Giannantonio	Telecom Italia, IT

Day Three – Wednesday, May 12

9h00-10h30	<i>"Multi-source Harvesting for Energy-Neutral WSNs"</i>	L. Benini	Un. Bologna, IT
11h00-12h30	<i>"Agile Enterprises Empowered with Cooperative Sensor Network Services"</i>	S. Karnouskos	SAP, DE
12h30	Closure by Pedro J. Marron & Roberto Verdone		

Workshop - Advanced Programme

(speakers confirmed, titles to be confirmed)

Day Three – Wednesday, May 12

13h45	Welcome by Pedro J. Marron & Sergio Palazzo		
14h00-15h00	<i>Keynote Speech</i>	tbd	
15h30-17h00	<i>NEWCOM++ session 1</i>	(see below)	
17h00-18h00	<i>posters/demos session</i>	(see below)	
20h00	Workshop Dinner		

Day Four – Thursday, May 13

9h00-10h30	<i>CONET session 1</i>	(see below)	
11h00-12h30	<i>NEWCOM++ session 2</i>	(see below)	
14h00-15h30	<i>CONET session 2</i>	(see below)	
16h00	Closure by Pedro J. Marron & Roberto Verdone		

NEWCOM++ session 1

A. Conti	Un. Ferrara, IT	<i>"Location-Aware Networks: Characterization Based on Experimentation and Case Study"</i>
C. Anton	CTTC, ES	<i>"Delay-tolerant vs. Delay-Constrained Estimation of Spatial Random Fields"</i>
A. Moustakas	IASA, GR	<i>"Opportunistic Communications in Infestation Systems"</i>

CONET session 1

S. Prabh	ISEP, PT	<i>"A Study of RSSI Fluctuations in Mobile Body Area Networks"</i>
J. Hauer	TUB, DE	<i>"Mitigating the Effects of RF Interf. through RSSI-Based Error Recovery"</i>
C. Boano	UzL, DE	<i>"Making Sensornet Protocols Robust against Interference"</i>

NEWCOM++ session 2

A. Zanella	IEIIT, IT	<i>"Performance of Virtual MIMO in a Poisson Field of Nodes"</i>
G. Vitetta	Un. Modena-R.E., IT	<i>"A Game Theoretical Approach to Distributed Relay Selection in Randomized Cooperation"</i>
G. Alfano	P. Torino, IT	<i>"Scaling laws and MAC Feasibility for Large Wireless Ad Hoc Networks"</i>

CONET session 2

J. Hauer	TUB, DE	<i>"An open-source implementation. of the IEEE 802.15.4 protocol in TinyOS"</i>
R. Martinez	AICIA, ES	<i>"WSN-robot collaboration for connectivity repairing"</i>
R. Martinez / A. Gonzalez	AICIA, ES	<i>"Integrated Testbed for WSN experiments"</i>