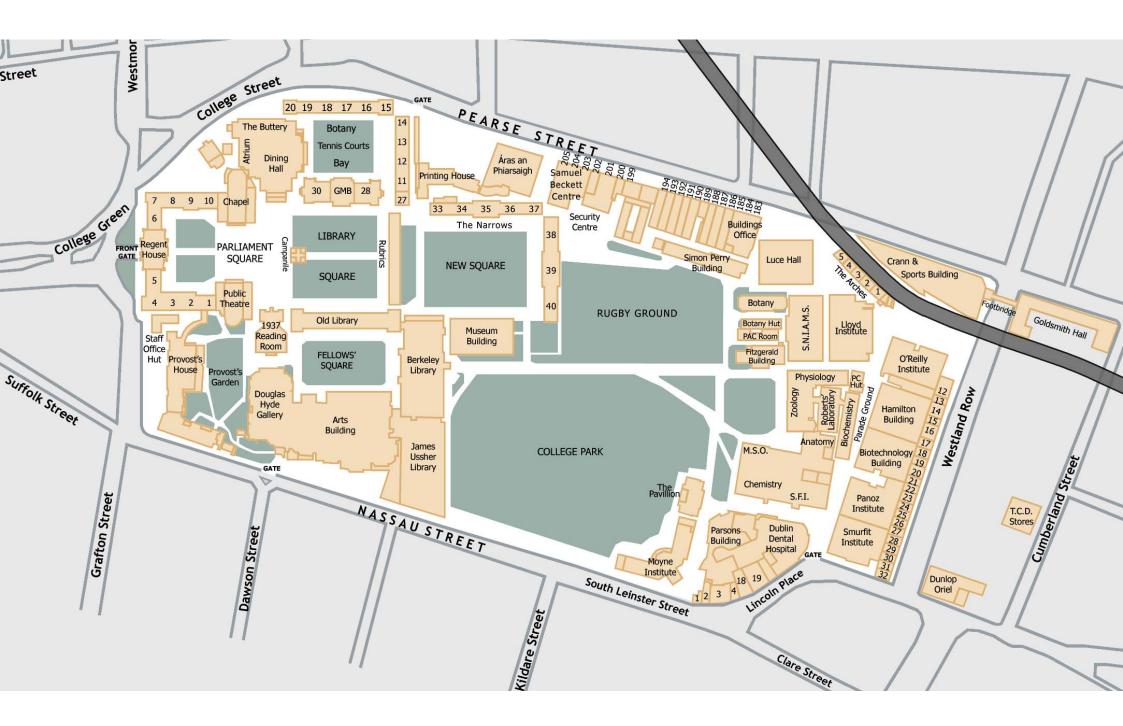
Joint Technical Programme MobiQuitous/ISVCS 2008

Venue: Hamilton Conference Centre, Trinity College Dublin Rooms: Joly, Maxwell, Salmon, Synge

		Legend	MobiQuito	ous event	ISVCS	Sevent	Joint	event		
Start time	Monday	21 st July	Tuesday 2	22 nd July	Wednesda	ıy 23 rd July	Thursday	/ 24 th July	Friday 2	25 th July
08:30	Registration of					h basement)				
09:00			Keyn Gregory		-	note eonard	-	note artenstein		
	IWCTS	SMPE	Ubiquitous Intellig for Multi-Agent S Mobile & Ubiq	Systems in the	The MIT DA Challeng	RPA Urban ge Team		tworks – quo eris?	HUCUBIS	MIMES
	Salmon	Synge	Jol	ly	Jo	bly	Jo	bly	Salmon	Synge
10:30				Morning	coffee break	(Hamilton bas	ement)			
11:00	IWCTS Salmon	SMPE Synge	Session 1 Middleware for Pervasive Applications Joly	Session 1 Industry Research and Practice Maxwell	Session 3 Pervasive Spaces Joly	Session 3 On-board Embedded Systems Maxwell	Session 5 The Social Factor Joly	Session 6 Traffic and Service Management Maxwell	HUCUBIS Salmon	MIMES Synge
12:30			L	unch (Buttery	Vaults in the [·]	Trinity Dining	Hall complex)	l i		
14:00	IWCTS Salmon	SMPE Synge	Session 2 Wireless Networks Joly	Session 2 Human Factor Designs Maxwell	Session 4 User Interaction with Pervasive Systems Joly	Session 4 Image Processing Applications Maxwell	Session 6 Mobile Device Challenges Joly	Session 7 Driver Information Systems Maxwell	HUCUBIS Salmon	MIMES Synge
15:30				Afternoon	o coffee break	(Hamilton ba	sement)			
16:00 16:30	IWCTS Salmon	SMPE Synge	One-minute Jol Demonstra poster s Hamilton con O'Reilly I	ly ation and ession acourse and	Panel Joly	Session 5 Vehicular Network Routing Maxwell				MIMES Synge
18:30			Bus to bang							
19:30 24:00			Conference The 'Hooley' Fox Bus to city	at Johnnie ('s						
2 1.00				Juopano	1					



Fifth Annual International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous) First Annual International Symposium on Vehicular Computing Systems (ISVCS)

21st - 25th July 2008, Trinity College Dublin, Ireland

Joint Technical Programme

Registration desk open from 8:30 every day	
Hamilton basement	

Monday 21st July

Full-day workshops, concurrent, please check individual workshop schedules:

1st International Workshop on Computational Transportation Science, Room Salmon

2nd International Symposium on Security and Multimodality in Pervasive Environments, Room Synge

Tuesday 22nd July



Lunch break Buttery Vaults in the Trinity Dining Hall complex

14:00 - 15:30	Session 2 - Wireless Networks Chair: Cristian Borcea Room Joly	Session 2 - Human Factor Designs Chair: Raja Sengupta Room Maxwell
	PAN-on-Demand: Leveraging Multiple Radios to Build Self-organizing, Energy- efficient PANs <i>Manish Anand and Jason Flinn</i>	Constraint-based Context-Rule Representation and Risk Classification for Driver Assistance Systems Simone Fuchs, Kyandoghere Kyamakya and Stefan Rass
	Modeling of the Channel-Hopping Anti-Jamming Defense in Multi-Radio Wireless Networks Sherif Khattab, Daniel Mossé and Rami Melhem	Vehicle as a Co-driver Nikola Serbedzija, Antonio Calvosa and Alessandro Ragnoni
	Using Physical Layer Emulation to Optimize and Evaluate Mobile and Wireless Systems	Supporting Implicit Human-to-Vehicle Interaction: Driver Identification from Sitting Postures Andreas Riener and Alois Ferscha
	Glenn Judd, Xiaohui Wang, Peter Steenkiste and Mei-Hsuan Lu	Estimation of Read-End Potential Conflict Using Time-To-Collision Model Bahar Namaki Araghi, Jalil Shahi and Aliasghar Mehdizadeh



9:00 - 10:30

Keynote Speech The MIT DARPA Urban Challenge Team John Leonard, MIT Department of Mechanical Engineering and MIT CSAIL

Chair: René Meier

Room Joly

This talk will describe Team MIT's performance in the 2007 DARPA Urban Challenge (DUC), which was held from October 26 though November 3rd in Victorville, CA. MIT was one of thirty five teams that participated in the DUC national qualifying event (NQE), and was one of eleven teams to qualify for the Urban Challenge final event based on our performance in NQE. Our team was one of six teams to complete the race, finishing in fourth place. We will review the design of our autonomous vehicle, Talos, a Land Rover LR3 equipped with a diverse range of lidar, vision, radar, and navigation sensors connected to a powerful blade cluster computer system. Our vehicle employed novel algorithmic approaches to perception, planning and control for the challenging task of autonomous driving in uncertain, dynamic environments. The performance of our system in the NQE and race events will be reviewed, and ideas for future research will be discussed. For more information, see http://grandchallenge.mit.edu

10:30 - 11:00

Coffee break Hamilton basement

11:00 - 12:30	MobiQuitous Session 3 - Pervasive Spaces Chair: Tatsuo Nakajima Room Joly	ISVCS Session 3 - On-board Embedded Systems Chair: Andreas Riener Room Maxwell		
	ScreenSpot: Multidimensional Resource Discovery for Distributed Applications in Smart Spaces Marko Jurmu, Sebastian Boring and Jukka Riekki	Topology Optimization of In-vehicle Multimedia Communication Systems Jörg Sommer and Elias Doumith		
	Evaluation of Context Distribution methods via Bluetooth and WLAN: Insights Gained while Examining Battery Power Consumption <i>Alisa Devlic, Alan Graf, and Paolo</i> <i>Barone</i>	Verifying Adaptive Cruise Control by Using Pi-Calculus and Mobility Workbench Gabriel Ciobanu and Stefan Rusu		
	User-Driven Mashups in Interactive Public Spaces Danny Soroker, Young Sang Paik, Yeo Song Moon, Scott McFaddin, Chandra Narayanaswami, HyunKi Jang, Daniel Coffman, MyungChul Lee, JongKwon Lee and Jinwoo Park	A Middleware Approach to Dynamically Configurable Automotive Embedded Systems Richard Anthony, Paul Ward, DeJiu Chen, Achim Rettberg, James Hawthorne, Mariusz Pelc, and Martin Törngren		

12:30 - 14:00

Lunch break Buttery Vaults in the Trinity Dining Hall complex

14:00 – 15:30	Session 4 - User Interaction with Pervasive Systems Chair: Ouri Wolfson Room Joly A Quantitative Approach to Non- intrusive Computing Hao Chen and James P. Black Designing Context-Aware In-Car	Session 4 - Image Processing Applications Chair: Jörg Sommer Room Maxwell Automotive Blind-Zones: A Review of Legislation and the Use of Close-Range Camera Systems Ciaran Hughes Martin Glavin, Edward Jones and Patrick Denn, Region Of Interest Detection For
	Information Systems Julian Masuhr, Florian Klompmaker,	Automotive Applications Lorcan Browne, Edward Jones and Martin
	Christian Reimann, Karsten Nebe	Glavin
	Towards Mobility Oriented Interaction Design: Experiments in Pedestrian Navigation on Mobile Devices Tetsuo Yamabe, Kiyotaka Takahashi and Tatsuo Nakajima	Real-Time Identification of Vehicles on Highways by 3D Model Matching under Stop-and-Go Conditions Francesco Micheli and Alessandro Mecocci
15:30 – 16:00		ee break n basement
16.00 18.00		
16:00 – 18:00	Panel	Session 5 - Vehicular Network Routing Chair: Richard Anthony
	Room Joly	Room Maxwell
		Application Driven Douting for Vehicular

Application Driven Routing for Vehicular
Ad Hoc Networks – A Necessity
Olivia Brickley, Martin Koubek, Susan Rea and Dirk Pesch
Experimental Evaluation of Peer to Peer
Applications in Vehicular Ad-hoc
Networks
Eugenio Giordano, Abhishek Ghosh,
Giovanni Pau and Mario Gerla
A Broadcast Vehicle to Vehicle
Communication System in Railway
Systems
Cristina Rico Garcia, Thomas Strang and
Andreas Lehner

GeoDTN+NAV: A Hybrid Geographic and DTN Routing with Navigation Assistance in Urban Vehicular Networks Jerome Harri, Pei-Chun Cheng, Jui-Ting Weng, Lung-Chih Tung, Mario Gerla and Kevin Lee

9:00 - 10:30

Keynote Speech Vehicular networks – quo veheris? Hannes Hartenstein, University of Karlsruhe

Chair: Vinny Cahill

Room Joly

This talk provides thoughts on the past, present and future of vehicle-to-X communications. We survey research results achieved in the last ten years and try to assess how well the currently available approaches and solutions meet the challenges of providing improvements with respect to traffic safety, traffic efficiency and environmental friendliness. Key aspects addressed in this talk are the issues of how to avoid congestion of the radio channel and of how to show the impact of wireless vehicular communications on safety and efficiency. We also look at current traffic telematics systems and analyze how the upcoming vehicle-to-X communication will fit into the big picture of cooperative systems. Finally, we state some "grand challenges" of vehicular communications and present next steps, in particular with respect to field operational tests.

10:30 - 11:00

Coffee break Hamilton basement

	Hamilto	in basement
11:00 – 12:30	MobiQuitous Session 5 - The Social Factor Chair: Cormac Driver Room Joly	ISVCS Session 6 - Traffic and Service Mgmt Chair: Francesco Piazza Room Maxwell
	Avoiding "Big Brother" Anxiety with Progressive Self-Management of Ubiquitous Computing Services Kevin Feeney, Dave Lewis, Kris McGlinn, Declan O'Sullivan, Anne Holohan	Service Management for Co-operative Vehicular Systems Gary O'Connor, Olivia Brickley and Dirk Pesch
	Exploiting Schelling Behavior for Improving Data Accessibility in Mobile Peer-to-Peer Networks Long Vu, Klara Nahrstedt and Matthias Hollick	A Management System for Improving Traffic Efficiency in Transportation Infrastructures George Dimitrakopoulos, Giouli Kritikou, Panagiotis Demestichas and Eleni Dimitrellou
	Predicting Network Availability Using User Context Upendra Rathnayake and Max Ott	Traffic Generator for Evaluating the Accuracy of Traffic Recording Devices with Loop Detectors Long-Bing Hsieh
12.20 14.00		Long-Bing Hsieh

12:30 - 14:00

Lunch break Buttery Vaults in the Trinity Dining Hall complex

14:00 - 15:30	Session 6 - Mobile Device Challenges	Session 7 - Driver Information Systems	
	Chair: Gregor Schiele	Chair: Cormac Driver	
	Room Joly	Room Maxwell	
	Accessing Speech Documents on Smartphones Marcel Rosu	Demonstrating hArtes project approach through an Advanced Car Information System Stefania Cecchi, Francesco Piazza, Lorenzo Palestini, Paolo Peretti, Emanuele Moretti, Ferruccio Bettarelli, Ariano Lattanzi and Emanuele Ciavattini	
	Online Trajectory Data Reduction using Connection-preserving Dead Reckoning Ralph Lange, Frank Dürr and Kurt Rothermel	Real-Time Video Compression for Driver Assistance Camera Systems Mehrnoush Rahmani, Holger Kloess, Wolfgang Hintermaier and Eckehard Steinbach	
	How to Edit Gigabyte XML Files on a Mobile Phone with XAS, RefTrees, and RAXS Tancred Lindholm and Jaakko Kangasharju	Vehicle Detection at Night Based on Tail- Light Detection Ronan O'Malley, Martin Glavin and Edward Jones	

15:30 – 16:00 Coffee break Hamilton basement

Friday 25th July

Full-day workshops, concurrent, please check individual workshop schedules:

1st International Workshop on Human Control of Ubiquitous Systems, Room Salmon

International Workshop on Middleware for Mobile Embedded Peer-to-Peer Systems, Room Synge

One-minute Madness / Demonstration and Poster Session Tuesday, 22nd July 2008 Trinity College Dublin

17:00 - 19:00

Nakajima

Demonstration

End User Tool for Deploying Smart Object Systems Fahim Kawsar and Tatsuo Nakajima

Demonstration of a Mobility-enhanced Pedestrian

Tetsuo Yamabe, Kiyotaka Takahashi and Tatsuo

Navigation on Mobile Devices

Posters

Towards an Embedded Agent Model for Android Mobiles Jorge Aguero, Miguel Rebollo, Carlos Carrascosa, Vicente Julián

Using Near Field Communication Technology to Achieve Near-Zero Configuration of Sensors *Nicolaj B. Christensen and Stefan Wagner*

ScreenSpot Resource Discovery for Smart Spaces andShaMobileVue Media Sharing ApplicationMaMarko Jurmu, Sebastian Boring and Jukka RiekkiLuc

Seamless Indoor/Outdoor Positioning with Streamspin René Hansen, Christian S. Jensen, Bent Thomsen and Rico Wind

Exploring NFC Interactive Panel Gustavo Ramirez Gonzalez, Mario Munoz Organero, Carlos Delgado Kloos and Angela Chantre Astaiza

RECOUP: Efficient Reconfiguration for Wireless Sensor Networks Sarah Pennington, Adrian Waller and Timothy Baugè

Encryption-Based Access Control for Building Management Laurent Gomez, Annett Laube, Vincent Ribiere, Alessandro Sorniotti, Christophe Trefois, Marco Valente and Patrick Wetterward

Community Multimedia Cards - CoMu Cards Heiko Pfeffer, Steffen Krüssel and Stephan Steglich

Mobile, Ubiquitous Information Seeking as a Group: The iBingo Collaborative Video Retrieval System Alan F. Smeaton, Colum Foley, Daragh Byrne and Gereth J.F. Jones

SimCon: A Tool for Modelling Context Sources for Rapid Evaluation of Pervasive Applications using Virtual Reality Kris McGlinn, Eleanor O'Neill and David Lewis Sharing Mobile User Experiences with Context-Based Mashups

Luca Costabello, Oscar Rodriguez Rocha, and Laurent-Walter Goix

On the Effects of Detailed Mobility Models in Vehicular Network Simulations *Kun-chan Lan and Chien-Ming Chou*

Application of Ubiquitous Technology to Ship Environments Beom Jin Park, Bugeun Paik, Seongrak Cho, Dongkin Lee, Heejin Kang, and Jin Choi

Determining User Presence using Context in a Decentralized Unified Messaging System (IPAD-UMS) Saguna, Prem Prakash Jayaraman, and Arkady Zaslavsky

IWCTS Schedule Monday, July 21, 2008 Trinity College Dublin

9:00 am	Introductory remarks			
	Ouri Wolfson and Peter Nelson			
9:20 am	Session 1 (4 papers): Invited papers			
	Some Research Questions for Computational Transportation Science <i>Glenn Geers</i>			
	On the Feasibility of Large-Scale Automated Highways Stacy Patterson, Bassam Bamieh, Amr El Abbadi and Mihailo Jovanovic			
	Data Management Challenges for Computational Transportation <i>Walid Aref and Mourad Ouzzani</i>			
	TransDB - GPS Data Management with Applications in Collective Transport <i>Christian Jensen and Dalia Tiesyte</i>			
10:40 am	Coffee break (Hamilton basement)			
11:10 am	Session 2 (4 papers): Data mining and prediction			
	Location Prediction Within the Mobility Data Analysis Environment Daedalus Fabio Pinelli, Anna Monreale, Roberto Trasarti and Fosca Giannotti			
	On Extracting Commuter Information from GPS Motion Data Dietmar Bauer, Markus Ray, Norbert Braendle and Helmut Schrom-Feiertag			
	Mining Sequential Association Rules For Traveler Context Prediction Chad Williams, Abolfazl Mohammadian, Peter C. Nelson and Sean Doherty			
	A Multi-Agent Traffic Controller With Distributed Fuzzy Intelligence Ahmet Sahan and Tatyana Yakhno			
12:30 pm	Lunch (Buttery Vaults in the Trinity Dining Hall complex)			
2:00 pm	Session 3 (4 papers): Architectures and privacy			
	Intelligent Traveler Assistant (ITA) Simulation Platform Design James Haran, Abolfazl Mohammadian and Peter Nelson			
	Scalable and Efficient Car Communication Topology Edmund Coersmeier and Robert Budde			

	A Real-time Integrated Transport/Communication/Database Architecture to Support Traffic Simulation <i>Kyriacos Mouskos, Umit Uyar, Akira Kawaguchi and Neville Parker</i> GPS Use by Households: Early Indicators of Privacy Preferences Regarding Ubiquitous Mobility Information Access <i>Caitlin Cottrill and Piyushimita (Vonu) Thakuriah</i>	
3:20 pm	Coffee break (Hamilton basement)	
3:50 pm	Session 4 (2 papers): Data Aggregation	
	Data aggregation in VANETs: the VESPA approach Bruno Defude, Thierry Delot, Sergio Ilarri, José Luis Zechinelli Martini and Nicolas Cenerario	
	SP-TAG*: Routing Algorithm in Non-stationary Transportation Networks <i>Betsy George and Shashi Shekhar</i>	
4:30 pm	Group discussion	
	What have we learned? Suggestions for future IWCTS workshops?	
5:30 pm	Workshop concludes	

SMPE Schedule Monday, July 21, 2008 Trinity College Dublin

Workshop programme

worksnop prog		
10:15 - 10:30	Welcome and Opening	
	Giuseppe De Pietro (General Co-Chair)	
10:30 - 11:00	Coffee break (Hamilton basement)	
11:00 - 12:30	Session 1.	
	Chair: Antonio Coronato	
	A Natural Pointing Technique for Semi-Immersive Virtual Environments	
	Luigi Gallo and Aniello Minutolo	
	A Study on Authentication/Authorization/Accounting and Roaming	
	Mechanism in Pervasive Environment	
	Jong-Sik Moon, Im-Yeong Lee, Deok-Gyu Lee and Jong- Hyuk Park	
	Congestion Control Protocol for Wireless Sensor Networks Handling	
	Prioritized Heterogeneous Traffic	
	Muhammad Mostafa Monowar, Md. Obaidur Rahman, Al-Sakib Khan Pathan	
	and Choong Seon Hong	
12:30 - 14:00	Lunch (Buttery Vaults in the Trinity Dining Hall complex)	
12:30 - 14:00 14:00 - 15:30	Session2.	
	Session2. Chair: Giuseppe De Pietro	
	Session2.Chair: Giuseppe De PietroThe Home Device Authentication System Construction for Pervasive Home	
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	Session2.Chair: Giuseppe De PietroThe Home Device Authentication System Construction for Pervasive HomeNetworkYun-kyung Lee, Deok Gyu Lee and Jong-wook HanTangible Security for Mobile Devices	
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14:00 - 15:30	 Session2. Chair: Giuseppe De Pietro The Home Device Authentication System Construction for Pervasive Home Network Yun-kyung Lee, Deok Gyu Lee and Jong-wook Han Tangible Security for Mobile Devices Yuqun Chen and Michael Sinclair An RFID-based application for handling the workflow of radioactive patients in a nuclear medicine department Massimo Esposito and Gennaro Della Vecchia 	
	 Session2. Chair: Giuseppe De Pietro The Home Device Authentication System Construction for Pervasive Home Network <i>Yun-kyung Lee, Deok Gyu Lee and Jong-wook Han</i> Tangible Security for Mobile Devices <i>Yuqun Chen and Michael Sinclair</i> An RFID-based application for handling the workflow of radioactive patients in a nuclear medicine department 	

HUCUBIS Schedule Friday, July 25, 2008 Trinity College Dublin

9:15 am	Welcome and Introduction	
	Ouri Wolfson and Peter Nelson	
9:30 am	Session 1. Visualization and User Interfaces	
	A Study on User Acceptance of Error Visualization Techniques Hendrik Lemelson, Thomas King, Wolfgang Effelsberg	
	Handwritten Character Recognition Using Orientation Quantization Based on 3D Accelerometer <i>Shiqi Zhang</i>	
10:30 am	Coffee break (Hamilton concourse)	
11:00 am	Session 2. Basic Models and Services	
	Privacy-Friendly User Modelling for Smart Environments Ibrahim Armac and Daniel Rose	
	A Multi-dimensional Model Enabling Autonomic Reasoning for Context- aware Pervasive Applications <i>Nearchos Paspallis, Konstantinos Kakousis, George A. Papadopoulos</i>	
	Fundamental Services for Context-Sensitive Mobile Applications Stephan Kopf, Thomas King, Philip Bostan, Hendrik Lemelson, Sina Deibert and Wolfgang Effelsberg	
12:30 pm	Lunch (Dining hall)	
2:00 pm	Session 3: Group Discussion & Closing	
	Proposed topic: user control in ubiquitous systems - need or not?	
3:30 pm	Coffee break (Hamilton concourse)	

MIMES Schedule Friday, July 25, 2008 Trinity College Dublin

9:15 – 9:30 am	Welcome and opening
9:30 – 10:30	Invited talk PLASTIC: Providing Lightweight & Adaptable Service for pervasive Information & Communication Valerie Issarny
10:30 - 11:00	Coffee break (Hamilton basement)
11:00 - 12:30	Session 1
	A Formalization of the SMEPP Model in Maude Francisco Duran, Francisco Gutierrez, Pablo Lopez, Ernesto Pimentel
	A Secure Middleware for Wireless Sensor Networks Claudio Vairo, Michele Albano, Stefano Chessa
	Tailoring Service Discovery to Embedded P2P Systems Antonio Brogi, Sara Corfini, Thaizel Fuentes
12:30 - 14:00	Lunch (Buttery Vaults in the Trinity Dining Hall complex)
14:00 - 15:30	Session 2
	Implementation and Performance Analysis for Key Divergent and Evolution Protocols in Wireless Sensor Network Han Chiang Tan, Jun Wen Wong, Jianying Zhou
	General Security Concept for Embedded P2P System Stefan Kraxberger, Udo Payer, Stefan Tillich
	An Adaptive Middleware Applied to the Ad-hoc Nature of Cardiac Health Care Gemma Power, Christopher Foley, Sasitharan Balasubramaniam, Dimtri Botvich
15:30 - 16:00	Coffee break (Hamilton basement)
16:00 - 17:00	Panel - Perspectives of mobile embedded peer-to-peer systems: trends and challenges
	Panelists: Esteban Cabrera (TECNATOM, Spain), Valerie Issarny (INRIA, France), Jianying Zhou (I2R, Singapore)