

Ict-PAMM Kickoff Meeting San Francisco 26th september 2011



COORDINATOR : ANNE SPALANZANI

INRIA RHÔNE-ALPES – FRANCE

ANNE.SPALANZANI@INRIA.FR

CO-COORDINATOR : PHILIPPE MARTINET

LASMEA, UMR 6602 DU CNRS – FRANCE

MARTINET@LASMEA.UNIV-BPCLERMONT.FR



Participants



- James Hu (Kumamoto University - Japan)
- Ren Luo (Taiwan University - Taiwan)
- Philippe Martinet (LASMEA - France)
- Fawzi Nashashibi (INRIA-IMARA France)
- Michel Parent (INRIA-IMARA France)
- Christian Laugier (INRIA-eMotion France)
- Anne Spalanzani (INRIA-eMotion France)
- Jorge Rios-Martinez (INRIA-eMotion France)
- Emmanuel Mazer (INRIA-eMotion France)
- David Daney (INRIA-Coprin France)
- excused: Eric Castelli (MICA Center - Vietnam)
- excused: Sukhan Lee (SKKU - Korea)

Schedule



- **9:00 Welcome**
- **9:15 Presentation of ict-Pamm (A. Spalanzani)**
- **9:30 Presentations of the partners**
- 9:30-9:50 Kumamoto-Japan (Z. Hu)
- 9:50-10:10 Ira-Lab, Taiwan (R. Luo)
- 10:10-10:30 INRIA-Emotion, France (C. Laugier, A. Spalanzani)
- 10:30-10:35 Mica Center, Vietnam (A. Spalanzani)
- 10:35-11:40 ISRC, Korea (A. Spalanzani)
- 10:40-11:00 LASMEA, France (P. Martinet)
- 11:00-11:20 INRIA-IMARA, France (F. Nashashibi)
- 11:20-11:40 PAL project (D. Daney)
- **Lunch time**
- **14:30-16:00 Tasks definitions, allocations, leaders**
- **16:00 Next meeting organization**
- All presentations will be available soon on the website of the project:
<http://emotion.inrialpes.fr/people/spalanzani/HomePAMM.html>

Previous Project : Cityhome



	Universities	Laboratories	Attendees
France	Blaise Pascal	LASMEA	P. Martinet
	Compiègne Technological	HEUDIASYC	P. Bonnifait, V. Cherfaoui
	Pierre Mendès France University	INRIA (e-Motion, IMARA)	C. Laugier, I. Paromchick, A. Spalanzani, F. Nashashibi, C. Boussard
Asia	Shanghai Jiao Tong	Intelligent Vehicles group	W. Bin
	Kumamoto	Uchimura&Hu	Z. Hu
	Sunkyungkwan	ISRC	S. Lee
	Nanyang Technological	NTU-CIM	D. Wang, W. Han

- New ways of driving vehicles (Man Machines Interface with human user)
- Safe navigation
- Vehicle collaboration
- GPS/Visual SLAM for precise local/global positioning for vehicle navigation in urban environment

Cityhome: Actions (1/2)



- **Workshops**

- PPNIV-IROS 2008 Nice, France
- MEPPC-IROS 2008 Nice, France
- SNODE-ICRA 2009 Kobe, Japan
- PPNIV-IROS 2009 St Louis, USA
- CITYHOME09 2009 Workshop/demo Cl-Fd, France
- ICRA-R_ITS10 2010 Anchorage, Alaska
- CITYHOME10 2010 Bintan, Indonesia
- **IROS** **2011** **San Francisco, USA**

- **Invited sessions**

- RNM-ICARCV 2008 Hanoi, Vietnam
- ITSC 2010 Funchal, Portugal
- ICARCV 2010 Singapore

Cityhome: Actions (2/2)



- **Special issues**

- JIFR 2009 D. Wang, P. Martinet, K. Iagnemma
- IEEE-RAS magazine 2012 To be launched
- IJRR 2012 To be launched

- **Demos**

- 2009: Demo in PAVIN French site for Cyber transportation (France)
- 2010: Demo World Expo 2010 Shanghai (China) (SJTU)

- **Publications**

- **Exchanges and Visits**

New project : Ict-PAMM (2011-2013)

Personal Assistance for Mobility and Manipulation



Motivation



- Medical expenses are increasing all over the world. More than 30% of these expenses can be related to elderly people.
- By the year of 2030, the number of elderly people will be doubled. Technical aids are required allowing people to live independently and supported in their private home as long as they wish.



Support disabled and elderly people with special needs in their living environment

Topics : Mobility of people, Manipulation of appliances and household objects, Social interaction, Distress detection

ict-PAMM 2011-2013



- **Goals of the project**

- Propose a **common definition of service robots**, their use and interaction with humans
- Develop **reliable and safe algorithms and technologies** for mobile and manipulation service robots
- **Demonstrate** in real places for mobile manipulation service robot
- **Exchange** ideas, research results and technologies (workshops, students & researchers exchanges ...) in the field of mobile and manipulation service robotic

- **6 Partners** (2 French and 4 Asian research groups)

- Intelligent Systems Research Center, Sungkyunkwan University, Korea
- Intelligent Robotics and Automation, National Taiwan University
- International research Center MICA, Hanoi, Vietnam
- Intelligent Transportation System Lab, Kumamoto University , Japan
- LASMEA, CNR Blaise Pascal University, Clermont Ferrand, France
- INRIA Rhône-Alpes, e-Motion team, Grenoble, France

Previous actions



- Dec.18-19,2010. Prof.Luo visited Kumamoto Univ.
- June 21-25, 2011. Prof.Hu and two PhD students visited National Taiwan Univ. during the WCICA2011.
- Sept. 5-6, 2011. Gabriel Synnaeve (phD at emotion/INRIA) visited SKKU.
- ...

Collaborative Actions



- The project will start by a Kickoff meeting (first step) aiming to:
 - Task T1 : select mobile manipulation service tasks to be investigated (service robotic and cyber transportation)
 - Task T2 : give a description of possible technologies developed by the partners
- The second step of the program concerns the collaboration actions for studying and developing the technologies for the selected tasks:
 - Task T3 : Technology for personally assisted living, visual search and retrieval of objects, appliance manipulation as well as for brain tweezing with social interaction (Managed by ISRC/SKKU)
 - Task T4 : Human interaction and knowledge based behaviors (Managed by MICA)
 - Task T5 : Environment modeling and understanding (Managed by Kumamoto University)
 - Task T6 : Navigation techniques using vision, risk assessment and social rules (Managed by LASMEA)



- Task T3 : Technology for personally assisted living, visual search and retrieval of objects, appliance manipulation as well as for brain tweezing with social interaction (Managed by ISRC/SKKU)
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Partner	T1	T2	T3	T4	T5	T6
INRIA eMotion	X	X		X		X
LASMEA	X	X	X			X
ISRC	X	X	X	X		
Kumamoto	X	X			X	
MICA	X	X		X	X	
IRA	X	X	X			

Budget



	MAEE	INRIA	Total
2011-2012	10k€	20k€	30k€
2012-2013	?	?	?

- Before having the second year financed, we need to send a scientific report as well as a financial one

Reimbursement Procedure



Difficult ! INRIA needs information for a first invitation. INRIA can reimburse people but not universities.

1. Send the form filled in to Myriam Etienne, e-Motion team assistante
Myriam.Etienne@inrialpes.fr
2. When you plan to travel in the scope of ict-PAMM, ask INRIA to book and buy your flight