

Schematic Program Aula III

	Monday, September 14	Tuesday, September 15	Wednesday, September 16	Thursday, September 17	Friday, September 18	Saturday, September 19
9:00 - 9:20	Registration (Aula VI) Putting up Poster Presentations (Aula III & IV)	Symposium Toivaiinen: "Spatiotemporal music cognition"	Symposium Hölscher, Nenci, Troffa: "Environmental determinants for orientation and navigation"	Symposium Van der Ham, Postma: "The neurocognition of categorical and coordinate spatial relation processing"	Tutorial Lupiañez: "Exogenous vs. endogenous spatial orienting"	Visit to S. Pietro in Vincoli
9:20 - 9:40						
9:40 - 10:00						
10:00 - 10:20						
10:20 - 10:40						
10:40 - 11:00						
11:00 - 11:20						
11:20 - 12:00	Conference opening (Aula Magna)	Coffee break	Coffee break	Coffee break	Coffee break	Presentation of the activities of CIRPS
12:00 - 12:20	Keynote (Aula Magna) Tversky: "Segmenting and connecting time and space"	Keynote (Aula Magna) Ormerod: "Optimizing and satisficing in spatial problem-solving"	Keynote (Aula Magna) Freksa: "Spatial reasoning for intelligent action and human-robot interaction"	Keynote (Aula Magna) Lupiañez: "Orienting attention in space: Attentional capture and voluntary control"	Paper Session: Cognitive neuroscience of action and space	Farewell Lunch in the Cloister of the Faculty of Engineering (hosted by CIRPS)
12:20 - 12:40						
12:40 - 13:00						
13:00 - 13:20						
13:20 - 14:40	Lunch time	Lunch time	Lunch time	Lunch time	Lunch time	
14:40 - 15:00	Symposium Hols, Kurata: "Spatial models meet spatial language: Computational and formal models"	Symposium Bodine, Scherer: "The promise and impact of technology in cognition and spatial negotiation"	Symposium Imberty: "Music and space: A phenomenological point of view"	Symposium Vickers: "Gaze and cognitive control in motor performance"	Symposium Pazzaglia: "Emotion, motivation and cognition in human wayfinding behavior"	
15:00 - 15:20						
15:20 - 15:40						
15:40 - 16:00						
16:00 - 16:20						
16:20 - 17:00	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	
17:00 - 17:20	Paper Session: Space and cognitive performance	Paper Session: Ecological spatial cognition	Paper Session: Rhythm, language and motor action	Paper Session: Cognitive control in space	Doctoral Colloquium Raffone	
17:20 - 17:40						
17:40 - 18:00						
18:00 - 18:20	Tutorial Scherer: "Using a mixed method research design"	Poster session I (Odd numbers)	Tutorial Tversky: "Space of thought"	Tutorial Shipley: "Understanding events, space and action: The role of segmentation and grouping"		
18:20 - 18:40						
18:40 - 19:00						
19:00 - 19:20						
19:20 - 19:40						
19:40 - 20:00						
after 20:00	Classical Ballet at the National Dance Academy	Night Visit of Castel Sant'Angelo	Theatre by the Research Group on Traditional Singing and Theatre Arts	Social dinner at "La Limonaia", Villa Torlonia	Closing of works Disco night at San Lorenzo	

Schematic Program Aula IV

	Monday, September 14	Tuesday, September 15	Wednesday, September 16	Thursday, September 17	Friday, September 18	Saturday, September 19
9:00 - 9:20	Registration (Aula VI) Putting up Poster Presentations (Aula III & IV)	Paper Session: Space and language	Paper Session: Virtual environments	Paper Session: Spatial representation	Tutorial Postma: "Remembering where you have been helps remembering what you have done"	
9:20 - 9:40						
9:40 - 10:00						
10:00 - 10:20						Visit to S. Pietro in Vincoli
10:20 - 10:40						
10:40 - 11:00						Presentation of the activities of CIRPS
11:00 - 11:20						
11:20 - 12:00	Conference opening (Aula Magna)	Coffee break	Coffee break	Coffee break	Coffee break	
12:00 - 12:20	Keynote (Aula Magna) Tversky: "Segmenting and connecting time and space"	Keynote (Aula Magna) Ormerod: "Optimizing and satisficing in spatial problem-solving"	Keynote (Aula Magna) Freksa: "Spatial reasoning for intelligent action and human-robot interaction"	Keynote (Aula Magna) Lupiañez: "Orienting attention in space: Attentional capture and voluntary control"	Paper Session: Spatial cognition in robotic agents	Farewell Lunch in the Cloister of the Faculty of Engineering (hosted by CIRPS)
12:20 - 12:40						
12:40 - 13:00						
13:00 - 13:20						
13:20 - 14:40	Lunch time	Lunch time	Lunch time	Lunch time	Lunch time	
14:40 - 15:00	Paper Session: Development and ageing	Symposium Gentner: "Spatial language and spatial cognition"	Symposium Catarci, Mecella, Aiello: "Spatial and cognitive awareness in human-sensors environment"	Symposium Shipley: "Action and cognition: The role of gesture in symbolic spatial reasoning"	Paper Session: Applied spatial cognition	
15:00 - 15:20						
15:20 - 15:40						
15:40 - 16:00						
16:00 - 16:20						
16:20 - 17:00	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	
17:00 - 17:20	Paper Session: Learning, attention and space	Paper Session: Space, language and perception	Poster session II (Even numbers)	Paper Session: Cognitive neuroscience of spatial representation	Paper Session: Human navigation	
17:20 - 17:40						
17:40 - 18:00						
18:00 - 18:20	Tutorial Gentner: "Analogy and structure-mapping in spatial learning"	Tutorial Lancioni: "Promoting motor responses in persons with profound intellectual and multiple disabilities"		Tutorial Macaluso: "Functional neuroimaging of spatial attention"		
18:20 - 18:40						
18:40 - 19:00						
19:00 - 19:20						
19:20 - 19:40						
19:40 - 20:00						
after 20:00	Classical Ballet at the National Dance Academy	Night Visit of Castel Sant'Angelo	Theatre by the Research Group on Traditional Singing and Theatre Arts	Social dinner at "La Limonaia", Villa Torlonia	Closing of works Disco night at San Lorenzo	

SCIENTIFIC PROGRAM - Monday, September 14, 2009

Aula III

Aula IV

9:00 - 12:00

Open desk: Registration (Room VI)

12:00 - 13:20

Keynote lecture (Aula Magna): Segmenting and connecting time and space
Barbara Tversky, Stanford University

13:20 - 14:40

Lunch time

14:40 - 16:20

SYMPOSIUM: Spatial models meet spatial language: Computational and formal models

PAPER SESSION: Development and ageing

Convenors: Joana Hois & Yohei Kurata, University of Bremen

Chair: Susan Levine, University of Chicago

14:40 - 15:00 Spatial cognition through the lens of spatial language

14:40 - 15:00 Assessing orientation categorization in the left and right hemispheres of the infant brain

Michele I. Feist, University of Louisiana at Lafayette

Dianne Catherwood, University of Gloucestershire

15:00 - 15:20 Translating between spatial representations and spatial language using a vaguefield model

15:00 - 15:20 Effects of ageing and selective attention on movement speed

Mark M. Hall, Cardiff University

Martin G. Edwards, University of Birmingham

15:20 - 15:40 Description of movement from a topological viewpoint

15:20 - 15:40 Graphic strategies in Williams syndrome and typically deloping children

Yohei Kurata, University of Bremen

Kerry Hudson, University of Reading

15:40 - 16:00 From 'location' to 'place', from 'path' to 'way': Spatiophysical constellation, spatial language, and a lexical-semantics model

15:40 - 16:00 Development of spatial cue integration between and within modalities

Matthias Weisgerber, University of Konstanz

M. Nardini, University of London

16:00 - 16:20 General discussion

16:00 - 16:20 The individual alpha EEG indices and nonverbal creativity in young children

E. A. Sapina, Russian Academy of Medical Sciences

16:20 - 17:00

Coffee break

17:00 - 18:00

PAPER SESSION: Space and cognitive performance

PAPER SESSION: Learning, attention and space

Chair: Thomas C. Ormerod, Lancaster University

Chair: Dianne Catherwood, University of Gloucestershire

17:00 - 17:20 Influence of motion and itinerary control on episodic memory

17:00 - 17:20 Moving attention between objects and across space: How the perceptual visual characteristics influence spatial conflict resolution

Ga  n Plancher, Universit   Paris Descartes

Paola Cappucci, Sapienza University of Rome

17:20 - 17:40 The effects of endogenous and exogenous spatial cueing in a sustained attention task

17:20 - 17:40 Compared influences of controlled and automatic spatial attentions on visuomotor priming effect

Mara Sebastiani, Sapienza University of Rome

G  rard Olivier, University of Nice Sophia-Antipolis

17:40 - 18:00 Ability of healthy subjects in orienting after imposed rotations

17:40 - 18:00 Attentional interference facilitates skilled anticipatory action

Giulia Zanelli, Sapienza University of Rome

Stefano Valenzi, Sapienza University of Rome and RIKEN Brain Science Institute

18:00 - 20:00

TUTORIAL: Using a mixed method research design

TUTORIAL: Analogy and structure-mapping in spatial learning

Marcia Scherer, University of Rochester

Deдре Gentner, Northwestern University

SCIENTIFIC PROGRAM - Tuesday, September 15, 2009

Aula III

Aula IV

9:00 - 11:20

SYMPOSIUM: Spatiotemporal music cognition

PAPER SESSION: Space and language

Convenor: Petri Toivainen, University of Jyv  skyl  

Chair: Michel Denis, ECI, Universit   Paris Descartes

9:00 - 9:20 How movement timing and kinematics are shaped by spatial attributes of pitch during musical sequence production

9:00 - 9:20 Towards testing route descriptions for plausibility using a Markov chain

Peter E. Keller, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig

Andrea Bauer, Technische Universit  t M  nchen

9:20 - 9:40 Features of body movements during the reproduction of rhythmic patterns: The influence of the

9:20 - 9:40 Language and spatial cue integration: Evidence from verbal interference studies

	events complexity Giulio Tirinelli, Sapienza University of Rome	Judith Bek, University of Sheffield
9:40 - 10:00	Perception of expression in conductors' gestures: a continuous response study Geoff Luck, University of Jyväskylä	9:40 - 10:00 Clothing terms and the body space: A cross-linguistic analysis of image-schemas and lexical fields Maria Catricalà, Università di Roma Tre
10:00 - 10:20	Music embodied in dance: Studies of dance-like movement in different populations Jessica Phillips-Silver, Université de Montréal	10:00 - 10:20 An investigation into the semantics of English topological prepositions John Kelleher, Dublin Institute of Technology
10:20 - 10:40	Embodied metre: Hierarchical eigenmodes in spontaneous movement to music Petri Toiviainen, University of Jyväskylä	10:20 - 10:40 Spoken versus written directions Marie-Paule Daniel, Limsi - Cnrs
10:40 - 11:00	Spatial cognition of Samba and Charleston Marc Leman, Ghent University	10:40 - 11:00 Exploring the relationship between spatial language and spatial cognition using the Spanish copula estar Monica Gonzalez-Marquez, Cornell University
11:00 - 11:20	General discussion	11:00 - 11:20 Assessing perspective in human-computer route dialogues: A contextual factor model Robert J. Ross, University of Bremen
11:20 - 12:00		<i>Coffee break</i>
12:00 - 13:20	Keynote lecture (Aula Magna): Optimizing and satisficing in spatial problem-solving Thomas C. Ormerod, Lancaster University	
13:20 - 14:40		<i>Lunch time</i>
14:40 - 16:20	SYMPOSIUM: The promise and impact of technology in cognition and spatial negotiation Convenors: Cathy Bodine (University of Colorado Denver) & Marcia J. Scherer (University of Rochester)	SYMPOSIUM: Spatial language and spatial cognition Convenors: Dedre Gentner, Northwestern University
14:40 - 15:00	A five-year retrospective: Lessons learned about technology and cognition Cathy Bodine, University of Colorado Denver	14:40 - 15:00 The relation between spatial language and spatial thinking Susan C. Levine, University of Chicago
15:00 - 15:20	Orientation technology with direction cues or corrective feedback for indoor travel of persons with multiple disabilities Giulio Lancioni, University of Bari	15:00 - 15:20 Effects of spatial language on spatial cognition during development Dedre Gentner, Northwestern University
15:20 - 15:40	Enhancing learning through spatial cognition and awareness Susan Treichler, Arvada public school, Colorado	15:20 - 15:40 Spatial language supports spatial cognition: Evidence from deaf homesigners Susan Goldin-Meadow, University of Chicago
15:40 - 16:00	Measuring the impact of technology on spatial cognition: How, when and with whom Marcia J. Scherer, University of Rochester	15:40 - 16:00 Computational modeling at the intersection of spatial, linguistic, and conceptual knowledge Kenneth D. Forbus, Northwestern University
16:00 - 16:20	General discussion	16:00 - 16:20 General discussion
16:20 - 17:00		<i>Coffee break</i>
17:00 - 18:00	PAPER SESSION: Ecological spatial cognition Chair: Cathy Bodine, University of Colorado Denver	PAPER SESSION: Space, language and perception Chair: Albert Postma, Utrecht University
17:00 - 17:20	The effects of 'order' and 'disorder' on human cognitive perception in navigatin through urban environments Alexandra Brettel, University College London	17:00 - 17:20 Photometric, figural and crossmodal factors in the perception of transparency and in depth stratification of layers Franco Delogu, RIKEN Brain Science Institute and Sapienza University of Rome
17:20 - 17:40	Investigating spatial behaviour: An application of space analysis to criminal investigations Lorenzo P. Luini, Sapienza University of Rome	17:20 - 17:40 Using space to represent data: Diagrammatic reasoning Valeria Giardino, Institut Jean Nicod (CNRS-EHESS-ENS)
17:40 - 18:00	Solid waste incineration and distance distortion: Distance estimation as an adaption tool Sílvia Luís, University of Lisbon	17:40 - 18:00 A study on the spatial perception in contemporary Japan through the analysis of the relationship between graphic and architectural language Maria Livia Olivetti, University of Roma Tre
18:00 - 20:00	POSTER SESSION I	TUTORIAL: Promoting motor responses in persons with profound intellectual and multiple disabilities

Odd numbers

through technology-based programs
Giulio Lancioni, University of Bary

SCIENTIFIC PROGRAM - Wednesday, September 16, 2009

Aula III

Aula IV

- 9:00 - 11:20 **SYMPOSIUM:** Environmental determinants of orientation and navigation
Convenors: Christoph Hölscher (University of Freiburg), Anna-Maria Nenci (LUMSA), Renato Troffa (University of Cagliari)
- 9:00 - 9:20 The influence of spatial structure and configuration on behaviour: Case study of a complex school environment
Erica Calogero, University College London
- 9:20 - 9:40 The relative importance of environmental factors on path choice
John Zacharias, Concordia University
- 9:40 - 10:00 Escape: Wayfinding strategies and emergency
Renato Troffa, University of Cagliari
- 10:00 - 10:20 How the geometry of space controls visual attention during wayfinding
Jan Wiener, University of Freiburg
- 10:20 - 10:40 Location and task effects on route learning in a large-scale virtual environment
Simon Büchner, University of Freiburg
- 10:40 - 11:00 Synchronization of brain dynamics with navigation behaviors in full scale, stereoscopic 3D virtual reality architecture
Eve A. Edelstein, University of California
- 11:00 - 11:20 General discussion

- PAPER SESSION:** Virtual environments
Chair: Christian Freksa, University of Bremen

- 9:00 - 9:20 Spatial problem solving: Assembling three-dimensional puzzles in real and virtual environments
Sarwan Abbasi, Université Paris Descartes
- 9:20 - 9:40 Learning a route in a virtual environment: The effects of differing cues on the performance of typical children and individuals with William syndrome
Emily Farran, Université de Lille 3
- 9:40 - 10:00 Spatial learning from tactile maps and virtual GPS audio guidance: Evaluation and comparison
James R. Marston, UC Santa Barbara
- 10:00 - 10:20 Barrier effects in real-world compared to virtual reality macro environments
Eva Neidhardt, University of Lüneburg
- 10:20 - 10:40 Enhancing navigation performance by cognitively motivated representation of angle information in virtual environments: The case of 3D wayfinding choremes
Denise Peters, University of Bremen
- 10:40 - 11:00 A visual sonificated web search clustering engine
Alessio Rugo, University of Perugia
- 11:00 - 11:20 Trajectory reconstruction with human behavioral route choice heuristics
Falko Schmid, University of Bremen

11:20 - 12:00

Coffee break

12:00 - 13:20

Keynote lecture (Aula Magna): Spatial reasoning for intelligent action and for human- robot interaction
Christian Freksa, University of Bremen

13:20 - 14:40

Lunch time

- 14:40 - 16:20 **SYMPOSIUM:** Music and space: A phenomenologic point of view
Convenor: Michel Imberty, University of Paris X, Nanterre
- 14:40 - 15:00 Music and space in the works of Maria Elena Vieira da Silva and Emmanuel Nunes
Jean-Marc Chouvel, Université de Reims
- 15:00 - 15:20 The sound dimension of the painted Palaeolithic caves
Iégor Reznikoff, Université de Paris Nanterre La Défense
- 15:20 - 15:40 Categorizing musical space
Makis Solomos, Université Montpellier 3
- 15:40 - 16:00 How space sounds: An inner view of space as a real compositional parameter

- SYMPOSIUM:** Spatial and cognitive awareness in human-sensors environments
Convenors: Tiziana Catarci & Massimo Mecella (Sapienza University of Rome), Marco Aiello (University of Groningen)
- 14:40 - 15:00 Novel techniques for voice-based spatial awareness in domestic environments
Maurizio Omologo, ITC-IRST
- 15:00 - 15:20 Brain-computer interfaces (BCIs) for next-generation immersive applications
Febo Cincotti, Santa Lucia Foundation
- 15:20 - 15:40 Interaction between navigation systems and human users in spatial environments
Christian Freksa, University of Bremen
- 15:40 - 16:00 Cognitive vision of objects

Valerio Sannicandro, IRCAM Paris

16:00 - 16:20 Echo in music: From spatial figures to temporal figures
Michel Imberty, University of Paris X, Nanterre

16:20 - 17:00

17:00 - 18:00 **PAPER SESSION:** Rhythm, language and motor action
Chair: Petri Toiviainen, University of Jyväskylä

17:00 - 17:20 Actual versus perceived embodiment of a rhythmic pulse
Geoff Luck, University of Jyväskylä

17:20 - 17:40 Contrast sets in spatial and temporal language
Thora Tenbrink, University of Bremen

17:40 - 18:00 Failure of spatial remapping underlies constructional apraxia after right hemisphere stroke
Russell, Brunel University and Santa Lucia Foundation

18:00 - 20:00 **TUTORIAL:** Spaces of thought
Barbara Tversky, Stanford University

Arnold W. M. Smeulders, University of Amsterdam

16:00 - 16:20 General discussion

Coffee break

17:00 - 19:00 **POSTER SESSION II**
Even numbers

19:00 - 20:00 **SYMPOSIUM:** Eye Tracking: Window to the Brain!
SMI SensoMotoric Instruments, Inc. (Teltow, Germany)

SCIENTIFIC PROGRAM - Thursday, September 17, 2009

Aula III

9:00 - 11:20 **SYMPOSIUM:** The neurocognition of categorical and coordinate spatial relation processing
Convenors: Ineke van der Ham & Albert Postma, Utrecht University

9:00 - 9:20 Hemispheric contribution to categorical and coordinate representational processes: A study on brain-damaged patients
Liana Palermo, Sapienza University of Rome

9:20 - 9:40 Spatial relation processing in perceived and remembered scenes
Ineke van der Ham, Utrecht University

9:40 - 10:00 The relationship between egocentric/allocentric frames and categorical/coordinate information
Tina Iachini, Second University of Naples

10:00 - 10:20 Processing coordinate and categorical spatial relations with different apertures of attention
Bruno Laeng, University of Oslo

10:20 - 10:40 Is the cerebral processing of categorical and coordinate spatial relations based on different or identical but differentially activated functional networks?
Christine Schiltz, University of Luxembourg

10:40 - 11:00 rTMS study of categorical and coordinate processing
Luigi Trojano, Second University of Naples

11:00 - 11:20 General discussion

Aula IV

PAPER SESSION: Spatial representation
Chair: Barbara Tversky, Stanford University

9:00 - 9:20 Alignment of spatial perspective
Elena Andonova, University of Bremen

9:20 - 9:40 Some reflections about the so-called "mirror paradox"
Pietro Chistolini, Technologies and Health Department, Rome

9:40 - 10:00 Effects on space representation of using a tool and a button
Ilaria Gaudiello, University of Bologna

10:00 - 10:20 Reorientation by slope cues in humans
Daniele Nardi, Temple University

10:20 - 10:40 The role of vision in egocentric and allocentric spatial frames of reference
Gennaro Ruggiero, Second University of Naples

10:40 - 11:00 Mechanisms of large-scale environmental search: Probability cueing depends on the relationship between landmarks and target distribution
Alastair D. Smith, University of Nottingham

11:00 - 11:20 The neural correlates of spatial reference frames processing
Michal Vavrečka, Department of Cybernetics, FEL CVUT, Prague

11:20 - 12:00

12:00 - 13:20 **Keynote lecture** (Aula Magna): Orienting attention in space: Externally and internally-driven attentional capture and voluntary control
Juan Lupiáñez, University of Granada

13:20 - 14:40

Coffee break

Lunch time

14:40 - 16:20 **SYMPOSIUM:** Gaze and cognitive control in motor performance
 Convenor: Joan N. Vickers, University of Calgary

14:40 - 15:00 Mapping the constraints on visual search behaviour in sport
 A. Mark Williams, Liverpool John Moores University

15:00 - 15:20 Police performing and training under pressure
 Raðul R. D. Oudejans, Vrije University

15:20 - 15:40 Visuo-motor control in far aiming tasks: Re-examining the location suppression hypothesis
 Mark Wilson, University of Exeter

15:40 - 16:00 Quiet eye control strategies in interceptive timing actions
 Derek Panchuk, Victoria University

16:00 - 16:20 Gaze and shooting performance of police officers in a force on force encounter
 Joan N. Vickers, University of Calgary

16:20 - 17:00

17:00 - 18:00 **PAPER SESSION:** Cognitive control in space
 Chair: Juan Lupiañez, University of Granada

17:00 - 17:20 Geometry and space: The spatial-angle association of response codes (S.A.N.A.R.C. effect)
 Antonia Fumarola, University of Trieste

17:20 - 17:40 Task complexity modulates trade-off between locomotion and working memory usage in a large copying paradigm
 G. Hardiess, University of Tübingen

17:40 - 18:00 Solving three spatial conflict types as a time: Evidence for multiple conflict control mechanisms
 Maria Jesus-Funes, University of Granada

18:00 - 20:00 **TUTORIAL:** Understanding events, space and action: The role of segmentation and grouping
 Thomas F. Shipley, Temple University

SYMPOSIUM: Action and cognition: The role of gesture in symbolic spatial reasoning
 Convenor: Thomas F. Shipley, Temple University

14:40 - 15:00 Gesture training leads to improvement in children's mental rotation skill
 Susan C. Levine, University of Chicago

15:00 - 15:20 Gesture changes thought by grounding it in action
 Susan Goldin-Meadow, University of Chicago

15:20 - 15:40 Gesture lends a hand to spatial communication
 David Uttal, Northwestern University

15:40 - 16:00 Thinking with gestures
 Angela Kessel, Columbia University

16:00 - 16:20 General discussion

Coffee break

PAPER SESSION: Cognitive neuroscience of spatial representation in imagery and perception
 Chair: Alberto Priori, University of Milan

17:00 - 17:20 Action simulation and spatial representation: An ERPs analysis applied to a motor imagery task
 Michela Balconi, Catholic University of Milan

17:20 - 17:40 Gestalt's principles in the brain: Left frontal-eye-field and the rule of good continuation
 Gianluca Campana, University of Padua

17:40 - 18:00 Mental imagery generation in different modalities activates sensory-motor areas
 Massimiliano Palmiero, Sapienza University of Rome and Riken Brain Science Institute, Tokyo

TUTORIAL: Functional neuroimaging of spatial attention
 Emiliano Macaluso, Santa Lucia Foundation

SCIENTIFIC PROGRAM - Friday, September 18, 2009

Aula III

9:20 - 11:20 **TUTORIAL:** Exogenous vs. endogenous spatial orienting
 Juan Lupiañez, University of Granada

11:20 - 12:00

12:00 - 13:20 **PAPER SESSION:** Cognitive neuroscience of action and space
 Chair: Emiliano Macaluso, Santa Lucia Foundation

12:00 - 12:20 Voluntary modification of musical execution by neurofeedback training
 O. M. Bazanova, Russian Academy of Medical Sciences

12:20 - 12:40 Spatial and temporal cognition for the sense of agency: Neuropsychological evidences
 Michela Balconi, Catholic University of Milan

12:40 - 13:00 Motor control in young patients with unilateral brain lesions: An MEG study
 Paolo Belardinelli, Helsinki University of Technology

13:00 - 13:20 Neural encoding underlying human action understanding and decision processes spread beyond the

Aula IV

TUTORIAL: Remembering where you have been help remembering what you have done: The shared neuro-cognitive basis between spatial and episodic memory
 Albert Postma, Utrecht University

11:20 - 12:00

12:00 - 13:20 **PAPER SESSION:** Spatial cognition in robotic agents
 Chair: Gregory Kuhnmuensch, University of Freiburg

12:00 - 12:20 Spatial language for route-based humanoid robot navigation
 Mohammed Elmogy, University of Hamburg

12:20 - 12:40 A study on a shared control navigation system: Human/Robot collaboration for assisting people in mobility
 Francesco Galluppi, Sapienza University of Rome

12:40 - 13:00 Spatial processes in mobile robot tele-operation
 Alberto Valero-Gomez, Sapienza University of Rome

13:00 - 13:20 Place cognition as an example of situated cognition: A study with evolved agents

Coffee break

	cerebral cortex: The dynamics of basal ganglia oscillations Alberto Priori, University of Milan	
13:20 - 14:40		
14:40 - 16:20	SYMPOSIUM: Emotion, motivation and cognition in human wayfinding behavior Convenor: Francesca Pazzaglia, University of Padua	
14:40 - 15:00	Anxiety dependent spatial navigation strategies in virtual and real space János Kállai, University of Pécs	
15:00 - 15:20	Influence of motivation on wayfinding Samvith Srinivas, University of Pittsburgh	
15:20 - 15:40	A neural mechanism underlying successful wayfinding Gabriele Janzen, Radboud University and Donders Institute for Brain	
15:40 - 16:00	Clinical and rehabilitation approach to navigation and spatial representation deficits: Description of a patient with posterior cortical atrophy Simona Gardini, University of Parma	
16:00 - 16:20	Route-learning in young and older subjects in a virtual town Valerie Gyselinck, University of Padua	
16:20 - 17:00		
17:00 - 19:40	DOCTORAL COLLOQUIUM Chair: Antonino Raffone, Sapienza University of Rome	
17:00 - 17:25	Influence of manual and ocular motor preparations on tactile and visual attention efficiency Alexandre Coutté, University of Nice Sophia-Antipolis	
17:25- 17:50	Using a virtual environment in assessing environmental spatial abilities Nurul Mohd Noor, Lancaster University	
17:50 - 18:15	Neuropsychology of spatial imagery: Visual mental imagery and perception in subject with acquired brain damage Serena Oliveri, Catholic University of Milan	
18:15 - 18:40	Avoid me - A spatial movement concept in human-robot-shared environments Annika Peters, Bielefeld University	
18:40 - 19:05	Evaluation of distances in virtual environments: Differences in visualization systems Chiara Saracini, Sapienza University of Rome	
19:05 - 19:30	Use of a motorized platform and an instrumented helmet to analyze the head kinematics during equilibrium perturbation Giulia Zanelli, Sapienza University of Rome	

19:40 - 20:00

Orazio Miglino, University of Naples "Federico II"

Lunch time

	PAPER SESSION: Applied spatial cognition Chair: Thomas F. Shipley, Temple University
14:40 - 15:00	Considerations in designing research to evaluate wayfinding technologies James R. Marston, UC Santa Barbara
15:00 - 15:20	Aging in mental representation from spatial descriptions: Role of spatial perspective and visuo-spatial ability Chiara Meneghetti, University of Padua
15:20 - 15:40	A model to characterise re-orientation strategies in natural orifice transluminal endoscopic surgery (NOTES) Mikael H. Sodergren, Imperial College London
15:40 - 16:00	Surgical wayfinding and navigation processes in the human body Thomas Stüdeli, Delft University of Technology
16:00 - 16:20	Developing spatial skills for adolescents Sheryl Sorby, Michigan Technological University

Coffee break

	PAPER SESSION: Human navigation Chair: Joan N. Vickers, University of Calgary
17:00 - 17:20	Background knowledge in human navigation: A case study in a supermarket Christopher Kalf, University of Freiburg
17:20 - 17:40	How fine-grained spatial analyses help us understand navigation behavior and performance with maps Gregory Kuhnmuensch, University of Freiburg
17:40 - 18:00	Street morphology and its effects on pedestrian movement in historical Cairo Nabil Mohareb, United Arab Emirates University
18:00 - 18:20	Changes in spatial anxiety when learning a new environment Valeria Tierno, Utrecht University and Sapienza University of Rome
18:20 - 18:40	Cognitive mapping analysis and regional identity Renato Troffa, University of Cagliari
18:40 - 19:00	Influences of map view and environmental conditions on mental maps of map users Markus Wunderlich, University of Bonn

Closing of works

SCIENTIFIC PROGRAM - Saturday, September 19, 2009

Faculty of Engineering

11:00 - 12:30

Presentation of the activities of CIRPS (Interuniversity Center for Research on Sustainable Development)

SCIENTIFIC PROGRAM - Poster Sessions	
Aula III - Tuesday, September 15, 18:00 - 20:00	Aula IV - Wednesday, September 16, 17:00 - 19:00
1 Video game play changes spatial and verbal memory: Rehabilitation of a single case with traumatic brain injury Marcella Caglio, University of Turin 3 Planned behavior and "local" norms: an analysis of the space-based aspects of normative ecological behaviour Giuseppe Carrus, University of Roma Tre 5 Line bisection performances in depressives Andrei Dumbrava, Al.I. Cuza University 7 Visual and verbal creativity, and their relationship with visuo-spatial and verbal proficiency Massimiliano Palmiero, Sapienza University of Rome and RIKEN Brain Science Institute 9 Visual search and visual feedback in Williams syndrome and typical development Susan Formby, University of Reading 11 Employing eye-gaze and arrow as cue to attention: Two different modes of attentional selection Andrea Marotta, Sapienza University of Rome 13 The situational influence of location and body orientation on the recall of survey knowledge Tobias Meilinger, Max-Planck-Institute for Biological Cybernetics 15 A meta-analysis of environmental spatial abilities Nurul Mohd Noor, Lancaster University 17 Pure imagery neglect for places and for objects Liana Palermo, Sapienza University of Rome 19 Embodying spatial relations in action and perception: a computational model Ivan I. Vankov, New Bulgarian University 21 From visual perception to place Johannes Wolter, University of Bremen 23 Short and long-term correlations in repetitive movements Irene Ruspantini, Technologies and Health Department, Rome 25 Monitoring changes in the spread of spatial attention following loss of situation awareness Graham K. Edgar, University of Gloucestershire 27 Word retrieval activations related to the contextual spatial tasks (Navigation and Allocentric) performed during their encoding: Preliminary fMRI results Alice Gomez, Université Pierre Mendès-France 29 Which kind of attention is necessary for perceiving gaze direction? Evidence from the locus-of-slack method Paola Ricciardelli, University of Milano - Bicocca 31 What kind of mental images are spatial forms? Mark Price, University of Bergen	2 Effects of action observation on movement execution Robert Hardwick, University of Birmingham 4 The effect of age on egocentric and allocentric spatial frames of reference Tina Iachini, Second University of Naples 6 How do we use distance representation based on spatial terms? Takatsugu Kojima, Kyoto University 8 Eye movements and mental models in reasoning with cardinal directions Maren Lindner, University of Bremen 10 A virtual reality based tool for the assessment of "survey to route" spatial organization ability in elderly population: Preliminary data Francesca Morganti, University of Bergamo 12 Hearing the "time is space" conceptual metaphor: A cross-cultural study Marc Ouellet, University of Granada 14 Age differences in spatial orientation ability: What is preserved in the elderly? Felicia Fiore, University of Padua 16 Age and sex differences in a virtual version of the reorientation task Luciana Picucci, University of Bari 18 On the role of conceptual and linguistic ontologies in the production of wayfinding dialogues Robert J. Ross, University of Bremen 20 Interaction between egocentric and allocentric frames of reference Francesco Ruotolo, Second University of Naples 22 Line bisection performances in apathy versus depression Andrei Dumbrava, Al.I. Cuza University 24 Multimodal device for assessing children orienting behavior in ecological environments Giuseppina Schiavone, Campus Bio-Medico, Rome 26 Construction of complex mental images Jan Frederik Sima, University of Bremen 28 Reference frame activation in spatial language: temporal dynamics Marijn E. Struiksma, Utrecht University 30 Architecture as interaction factor on virtual museums design Talita Christine P. Telma, Freiburg University 32 Components of visual neglect: Attentional bias vs. spatial working memory impairment Monica Narcisa Toba, Université Pierre et Marie Curie-Paris6 and Inserm, U975, Paris