

ICSC 2015 – Conference Program

(by July 31, 2015)

Conference site:

Faculty of Medicine and Psychology, Via dei Marsi 78, 00185 Rome

Monday, September 07

REGISTRATION

(Entrance Hall, from 09:00)

OPENING CEREMONY

(Aula Magna, 11:40-12:00)

KEYNOTE LECTURE

(Aula Magna, 12:00-13:20)

Kevin O'Regan:

Constructing space: A theoretical basis for how naive artificial or biological agents can construct spatial notions

INAUGURAL BUFFET

(13:30-15:00)

Aula III

TALK SESSION 1 *Spatial Frames and Perspectives 1*

- 15:00-15:20** Cerles & Rousset: *Recollecting words while processing space: An interference paradigm*
- 15:20-15:40** Freundlieb et al.: *Evidence for spontaneous visuospatial perspective-taking during social interactions*
- 15:40-16:00** Papadopoulou: *The Architect's Perspective on the Tour and Map Perspective*
- 16:00-16:20** Sugimoto et al.: *The effect of understandability on wayfinding through survey- and route-based expressions*

Aula IV

TALK SESSION 2 *Navigation 1*

- Arkin et al.: *Using visual information for spatial advice giving in a primate-inspired autonomous robot*
- Epstein et al.: *Spatial Abstraction for Autonomous Robot Navigation*
- Macagno et al.: *Using 3D Immersive Virtual Environments to Monitor Human Navigation in a Human Analog of the Morris Water Navigation Task: The VE-HuNT System*
- Pouliquen-Lardy et al.: *Virtual Collaboration: Effect of spatial configuration on spatial statements production*

Aula VII

TALK SESSION 3 *Emotion and Space*

- Kumoğlu & Olguntürk: *The effects of correlated colour temperature on wayfinding performance and emotional reactions: A study in a virtual airport environment*
- Liang et al.: *Effects of emotional states on temporal order thresholds*
- Luce & Carter: *Positive it is this way? The role of mood on global versus local landmark use within virtual environments*
- Marmolejo-Ramos, Correa et al.: *The place of joy, surprise and sadness in vertical space*

TEA BREAK

(Aula VIII, 16:20-16:50)

SYMPOSIUM 1

Situated cognition and the philosophy of place Convenors: Hünefeldt & Schlitte

- 16:50-17:10** Gallagher: *Situating interaction in peripersonal and extrapersonal space: Phenomenology, social psychology and neuroscience*
- 17:10-17:30** Tversky: *Thinking in and out of Place*
- 17:30-17:50** Clancey: *Projecting Ourselves into Space: The Embodied Experience of Exploring Mars through Robotic Laboratories*
- 17:50-18:10** Seamon: *Human-Immersion-in-Place: Phenomenology, Body-Subject, and Environmental Embodiment*
- 18:10-18:30** Trigg: *A sense of (non-)place: A phenomenological analysis*
- 18:30-18:50** Malpas: *Place and Placedness*

SYMPOSIUM 2

Anticipatory object interaction: perceptual and motor aspects Convenors: Belardinelli & Butz

- Farnè: *Seeing to Feel: Anticipating contact in hand-objects interactions*
- Foerster & Schneider: *Anticipatory eye movements in sensorimotor actions: On the role of guiding fixations during learning*
- Belardinelli & Butz: *Action in the eye of the beholder: Goal-oriented gaze strategies*
- Herbort & Butz: *Planning grasps for object interaction: The role of motor simulation*
- Himmelbach: *It takes two: Knowing tools and understanding tools*
- Koester & Schack: *Grasping interacts with word meaning: Neurophysiological evidence*

TALK SESSION 4 *Spatial memory*

- Azanon et al.: *Prototype effects on the retrieval of spatial location*
- Bochynska & Laeng: *Tracking down the path of memory: Eye scanpaths facilitate retrieval of visuospatial information*
- Delogu & McMurray: *Do we forget where the sounds come from?*
- Engemann et al.: *How language impacts memory of motion events in English and French*
- Holmes et al.: *Remembering where: Effects of perspective change and object rotation on spatial memory*
- Murcia-Lopez et al.: *Preliminary findings on the effect of scale transformations on spatial memory in immersive and desktop virtual environments*

Tuesday, September 08

Aula III

SYMPOSIUM 3
Individual differences in spatial cognition using virtual objects and environments
 Convenor: Stefanucci

- 8:30-8:50** Shelton et al.: *Spatial Learning Profiles: Using Virtual Environments to Dissociate Preference from Prowess*
- 8:50-9:10** Stefanucci et al.: *An Investigation of Mobility and Spatial Anxiety on Spatial Memory in a Virtual Environment*
- 9:10-9:30** Creem-Regehr et al.: *Effects of Spatial Abilities, Cue-Types, and Scale on Spatial Memory in Virtual Natural Landscapes*
- 9:30-9:50** Meilinger, Takahashi et al.: *Spatial orientation as a social cue – the case of objects and avatars*
- 9:50-10:10** Hegarty et al.: *Individual Differences in Spatial Abilities across Different Scales of Space*

Aula IV

SYMPOSIUM 4
Human Behavior, Design, and the Built Environment. The Case of Visuo-Spatial Cognition and Computation
 Convenor: Bhatt

- Bhatt: *Architectural Design Cognition and Computation - I*
- Tversky & Chou: *Thinking with Things in Design*
- Kalay et al.: *Simulating agents' spatial and social cognition by means of a distributed artificial intelligence mechanism*
- Portugali & Haken: *Information adaptation in urban design*
- Schultz: *Architectural Design Cognition and Computation -II*

COFFEE BREAK
 (Aula VIII, 10:10-10:40)

Aula VII

SYMPOSIUM 5
No here without now: Temporal situatedness
 Convenors: Bao & Pöppel

- Miyake et al.: *Co-creation of the present: effects of voluntary movements on simultaneity perception*
- Wang et al.: *Subjective present: A window of temporal integration.*
- Zhou et al.: *Situational context is important: Perceptual grouping modulates temporal perception*
- Zaytseva et al.: *Episodic memory- A connection between the past and the present.*
- Avram: *Time sentience may vary according to perspective in moral judgments*

SYMPOSIUM 6
Individual Differences in Navigating
 Convenor: Weisberg

- 10:40-11:00** Weisberg & Newcombe: *It's not can but how: Navigation aptitude and strategy*
- 11:00-11:20** Chen & McNamara: *Individual Differences in Cue Combination during Navigation*
- 11:20-11:40** Negen & Nardini: *When Do People Use Path Integration to Build Metric Maps of Space?*
- 11:40-12:00** Marchette et al.: *Navigation ability predicts the spatial organization of free recall*

SYMPOSIUM 7
Situated cognition in the space of social interactions: from the bodily-self to shared spatial representations
 Convenors: Candidi & Bufalari

- Lenggenhager: *The bodily self in shared and social space – A neurological perspective*
- Chakrabarti: *The role of reward in simulative processes: Insights from and for autism*
- Sebanz et al.: *Spatial Perspective Taking in the Context of Joint Action*
- Pezzulo: *Shared Action Spaces: (How) does the brain merge the co-actors' spatial representations during social interactions?*

TALK SESSION 5
Language and space

- Catricalà & Guidi: *Onomatopoeias and ideophones: A new study about the interface between space, image schemas and phoneme clusters*
- Cerquellini: *Spatial Frames of Reference in Traditional Negev Arabic: Language -to-Cognition Correlation*
- Schick et al.: *Language cues in the formation of hierarchical representation of space*
- Yagi: *Spatiality of Shared Intentionality and Language Universals: A Philosophical Reflection*

12:00-13:20

Aula III

**POSTER SESSION 1
Attention and Perception 1**

1. Balconi et al.: *Environment Impact based on Functional and Aesthetical Features: What is their influence on spatial features and rewarding mechanisms?*
2. Bourrelly et al.: *Does posture or gravity influence the perception of affordances?*
3. Conti et al.: *A Cognitive Robotics approach for the study of Unilateral Spatial Neglect*
4. Fini et al.: *The "Near extrapersonal space" (NES): A subjective space affected by the individual's physical and personality characteristics*
5. Imbir: *Duality of emotion approach in case of flanker task performance: An attempt to understand emotion-cognition interactions from new perspective*
6. Manca & Fornara: *Confirmatory Factor Analysis for Indicators of Perceived Environmental Quality of the Stadium (IPEQS)*
7. Morgado et al.: *The effect of body posture on power and space perception*
8. Pedale et al.: *The impact of emotional stimuli in biasing attentional selection during visual search in natural scenes*
9. Thomas et al.: *Looking up and down: Semantic meaning automatically directs vertical attention*
10. Uiga et al.: *Mechanisms underlying reinvestment by older adults during walking*
11. Yang et al.: *Spatial orienting around the fovea: Exogenous and endogenous cueing effects*

Aula IV

**POSTER SESSION 2
Representation & Memory 1**

1. Borgo & Stufano: *Understanding architectural types*
2. Cerles et al.: *An implicit spatial memory alignment effect*
3. Dutriaux & Gyselink: *Posture and imagery in the memory of manipulable objects*
4. Georges et al.: *The link between number-space associations and visuospatial abilities depends on cognitive style*
5. Janyan et al.: *Remember down, look down, read up: Does a word modulate eye trajectory away from remembered location?*
6. Kluss et al.: *Representation of Impossible Worlds in the Cognitive Map*
7. Li & Zhao: *The Choice of Intrinsic Axis under Multi-cue Conditions*
8. Lilla & Delogu: *Where was it? Object location memory depends on sensory modality*
9. Maier et al.: *Cultural spatial biases: Number generation is influenced by reading direction*
10. Cavallina et al.: *The Effects of Space and Time interactions on The Corsi Block Tapping Test: An investigation of the motor aspects of the task*
11. Quinton & Smeding: *When abstract concepts get bound together through time and space: a case study on implicit stereotypes*
12. Ruotolo et al.: *The way people represent spatial information depends on the characteristics of the task: Effects of delay and stimuli manipulability*

Aula VII

**POSTER SESSION 3
Movement, Action & Navigation 1**

1. Bennett & Giudice: *Developing Compensatory Augmentations for Aging and Navigation*
2. Cogné et al.: *Contextual auditory stimuli are helpful on virtual spatial navigation in patients with visual neglect*
3. Corveleyn et al.: *Effect of central vision deficit in reach and grasp task*
4. Frankenstein: *Imagined and actual movement through the environment and the reference frame orientation in survey knowledge recall*
5. Lemieux et al.: *Gender Differences When Manipulating Confidence During A First-Person Virtual Maze Learning Task*
6. Mukawa et al.: *The effect of repetition priming on spatial memory during backtracking in a novel environment*
7. Palmiero et al.: *Situated navigational working memory: The role of positive mood*
8. Redhead: *Conditioned Inhibition within a real and virtual water maze task*
9. Sahai et al.: *Space influences evocation of structural and functional object-related gestures*
10. Seepanomwan et al.: *The role of intrinsic motivation in the development of tool use: A study in infant robots*
11. Spataro et al.: *Do pointing movements facilitate the recall of serial positions in visuospatial working memory?*

LUNCH BREAK

(Aula VII & VIII, 13:30-15:00)

KEYNOTE LECTURE
(Aula Magna, 15:00-16:20)

Vittorio Gallese:
Embodied simulation and the space around us: The perspective of cognitive neuroscience

TEA BREAK
(Aula VIII, 16:20-16:50)

Aula III

SYMPOSIUM 8
Motor perspectives on social interaction
Convenor: Gianelli

16:50-17:10

D'Ausilio et al.: *Sensorimotor information flow in interacting partners*

17:10-17:30

Sartori et al.: *Complementary Actions: Novel perspectives*

17:30-17:50

Quesque et al.: *Perceiving social intention in motor actions at the second-person perspective*

17:50-18:10

Reader & Holmes: *Keeping social interaction social: New kinematic methods and analyses for improving validity*

18:10-18:30

Letesson et al.: *Eye contact during action observation triggers allocentric action representation*

18:30-18:50

Aula IV

SYMPOSIUM 9
How do numbers move mentally? The interplay between numerical cognition and multiple dimensions of space
Convenors: Lugli & Winter

Göbel: *Up or down? Reading direction influences counting direction - A cross-cultural comparison*

Lachmair et al.: *When words meet numbers: Spatially Grounded Associated Response Codes?*

Lugli et al.: *Moving through the space: How arithmetical calculations are involved*

Winter et al.: *Gesture space corresponds to mental number space: Evidence from "tiny" and "low" numbers*

Shaki: *Spatial biases in mental arithmetic without spatial responses? Operational Momentum revisited*

Lourenco: *Probing the mental number line: A between-task analysis of spatialnumerical associations*

Aula VII

TALK SESSION 6
Space concepts

Dal Pian: *Measuring land in agriculture and calculating area in Euclidean Geometry: An encounter of liminal spaces*

Holischka: *Virtual places as real places: About the distinction between fiction and interactive virtuality*

Jonietz & Timpf: *On The Relevance of Gibson's Affordance Concept for Geographical Information Science (GISc)*

Nitsche: *Images of Situated Cognition: Involvement and Location*

Zaman et al.: *Being the Body: A Computational Approach to Human Experience of Space*

Wednesday, September 09

Aula III

SYMPOSIUM 10

Neurocomputational Approaches to Spatio-temporal Attention

Convenors: Simone & Gigliotta

- 8:30-8:50** Akyürek: *Temporal integration in the context of computational models of the attentional blink*
- 8:50-9:10** Bowman: *Attention Increases the Acuity of Conscious Perception: All-or none Percepts, Temporal Variance and the Simultaneous Type/ Serial Token Model*
- 9:10-9:30** Raffone: *Modelling consolidation and selection for encoding in visual working memory*
- 9:30-9:50** Simone & Nolfi: *Selection-for-action emerges in neural networks trained to learn spatial associations between stimuli and actions*
- 9:50-10:10** Gigliotta et al.: *Neuromodelling based on Evolutionary Robotics: On the importance of motor control for spatial attention*

Aula IV

SYMPOSIUM 11

Computing Embodied Architectures

Convenors: Papadopoulou et al.

- Ackermann: *Displaced, Detached, Disembodied: Perpetually connected yet [mostly] out of touch*
- Gün: *(e)Scapes (for) Bridging Visual-Making and Computing*
- Mavros: *A neuropsychological perspective of Spatial Experience*
- Ntzani: *Enchanting spaces of time-past; Investigating the effects of reading metaphors on public engagement with archaeological remains*
- Paloma Gonzalez Rojas: *Motion Metrics and Mental Maps*

Aula VII

SYMPOSIUM 12

Individual differences in wayfinding

Convenors: van der Ham et al.

- Nardini & Negen: *Individual differences in the development of spatial frames of reference*
- O'Malley et al.: *Do you still know how to get there? Effects of cognitive ageing on route memory*
- Meneghetti & Bonvento: *Learning through "orienteeing": Comparing the visuospatial abilities and environment representations of individuals with and without orienteeing experience*
- van der Ham & van Stralen: *Left right confusion: effects of strategy*
- Meilinger, Rebane et al.: *The acquisition of survey knowledge through navigation*

COFFEE BREAK

(Aula VIII, 10:10-10:40)

SYMPOSIUM 13

"Fictive Motion" and Situated Cognition: How to Resolve the Tension?

Convenors: Zlatev & Fagard

- 10:40-11:00** Pajunen & Itkonen: *Eliciting different perspectives upon fictive motion: Evidence from Finnish*
- 11:00-11:20** Stosic et al.: *Does the road go up the mountain? Fictive motion between linguistic conventions and cognitive motivations*
- 11:20-11:40** Blomberg & Zlatev: *Non-actual motion: Phenomenological analysis and linguistic evidence*
- 11:40-12:00** Ekstrom et al.: *The expression of Non-Actual Motion in Swedish Sign Language*

TALK SESSION 7

Body and Space 1

- Grade, D'Ursel et al.: *The influence of body posture and action observation priming on reachability judgment and distance estimation*
- Ruggiero, Senese et al.: *I feel like you when you come close to me: Motor simulation and inter-bodies distances*
- Thair & Newport: *The effects of spatial discrepancy on peri-personal space in virtual environments*
- Wignall et al.: *Body Schema, Size and Gender: A Motor Imagery Study*

TALK SESSION 8

Spatial Frames and Perspectives 2

- Alacam et al.: *Switching Reference-frame Preferences During Verbally Assisted Haptic-graph Comprehension*
- Avraamides et al.: *Sensorimotor interference in reasoning from imagined perspectives*
- Cooperrider et al.: *Spatial frames of reference in gesture: Evidence from bilingual Mexico*
- Gramann: *Neural correlates of mental rotations for different reference frame proclivities*

KEYNOTE LECTURE
(Aula Magna, 12:00-13:20)

Yan Bao:
Spatial attention is eccentricity dependent: Where something is, matters!

LUNCH BREAK
(Aula VII & VIII, 13:30-15:00)

KEYNOTE LECTURE
(Aula Magna, 15:00-16:20)

Susan Goldin-Meadow:
How our hands help us spatialize

TEA BREAK
(Aula VIII, 16:20-16:50)

Aula III

SYMPOSIUM 14
Spatial Language and Spatial Cognition
Convenor: Gentner

- 16:50-17:10** Gentner et al.: *Spatial Language and Spatial Comparison Combine to Support Children's Learning*
- 17:10-17:30** Majid et al.: *Spatial Relations in Closely Related Languages*
- 17:30-17:50** Levine et al.: *Variations in Parents' Spatial Language Predict Children's Spatial Skill*

Aula IV

ECONA MEETING, 16:50-17:50

Aula VII

FILM, 16:50-17:50
Gerrit A. C. Derks:
Mental space psychology

SOCIAL DINNER
(Ristorante "Consolini", Via Marmorata 28; 20:30)

Thursday, September 10

Aula III

SYMPOSIUM 15
Architectural psychology and inhabited spaces: A multidisciplinary approach to improve quality of life
Convenor: Pazzaglia

- 8:30-8:50** Pazzaglia: *New challenges for architectural psychology*
- 8:50-9:10** Bonaiuto & Fornara: *Urban environment and well-being*
- 9:10-9:30** Siviero: *Footbridges as elements for Urban Rehabilitation and Renewal*
- 9:30-9:50** Culatti: *Bridges in the landscape: Qualitative aspects*
- 9:50-10:10** O'Malley et al.: *Reducing spatial disorientation for older adults with memory difficulties: Towards dementia-friendly architecture*

Aula IV

SYMPOSIUM 16
The Quiet Eye As an Objective Measure of Situated and/or Spatial Cognition
Convenor: Vickers

- Causer et al.: *Developing spatial cognition through the identification and training of visual attention in surgical skills*
- Klostermann et al.: *The Quiet Eye and Information Processing: Facilitation of Stimulus Identification and Response Selection*
- Wilson et al.: *"Use your illusion II": Influencing spatial cognition and action.*
- Gonzales et al.: *Quiet eye duration in expert and novice archers: A task complexity dichotomy*
- Vine et al.: *Blink and you might miss it: Blinks may reflect an inward shift of attention, during the performance of a skill*

Aula VII

SYMPOSIUM 17
Multimodal perspectives on spatial cognition
Convenor: Forbus

- Cohn: *Learning about space, time and activities from a robot perspective*
- Freksa: *Computational problem solving in spatial substrates*
- Pustejovsky: *Affordances and the functional characterization of space*
- Forbus: *Sketching our way to spatial learning*

COFFEE BREAK
(Aula VIII, 10:10-10:40)

SYMPOSIUM 18
Situated cognition in the arts
Convenors: Reboul & Guelton

- 10:40-11:00** Reboul: *Decoupling, situated cognition and immersion in art*
- 11:00-11:20** Trentini: *Immersion as an embodied cognition shift: Aesthetic experience and spatial situated cognition*
- 11:20-11:40** Ganczarek et al.: *Intersection of Reality and Fiction in Art Perception*
- 11:40-12:00** Guelton: *« Hupareel »: experiences & immersions in an Hybrid Reality Game between Paris – Shanghai – Montreal*

SYMPOSIUM 19
Eye movement-related brain activity in visuospatial information processing
Convenors: Nikolaev & van Leeuwen

- Pannasch: *Eye movement-related brain activity in free visual exploration*
- Nakatani et al.: *Perceivers' internal state tags fixation-by-fixation visual information: An EEG-eye movement co-registration study*
- Ossandon et al.: *Predictions of visual content across eye movements and their modulation by inferred Information*
- Nikolaev & van Leeuwen: *Encoding of visuospatial information in free viewing*

TALK SESSION 9
Navigation 2

- Burgmanis et al.: *The influence of travel behavior on cognition of urban environment*
- Claessen et al.: *The effect of instruction on the spatial and temporal aspects of route knowledge*
- Nardi et al.: *More on the Ability to Use Slope for Navigation: Evidence From Children*
- Smith et al.: *Developmental trajectories of path integration: The influence of concurrent task*

KEYNOTE LECTURE
(Aula Magna, 12:00-13:20)

Shaun Gallagher:
Intersubjective relations in lived space and instituted space

LUNCH BREAK
(Aula VII & VIII, 13:30-15:00)

KEYNOTE LECTURE
(Aula Magna, 15:00-16:20)

Sergei Gepshtein:
Solid field of sensitivity: Perceptual structure of immersive space

TEA BREAK
(Aula VIII, 16:20-16:50)

Aula III

SYMPOSIUM 20

Situated spatial cognition and social processing: body, emotions and interactions in space

Convenor: Iachini

- 16:50-17:10** Saulton et al.: *The interaction of social and spatial cognitive processes in naturalistic social interactions*
- 17:10-17:30** Tajadura-Jimenez: *The Hearing Body: Influences of audition on body and space representations*
- 17:30-17:50** Coello et al.: *The motor encoding of peripersonal space and its role in social interactions*
- 17:50-18:10** Lloyd & Koutsopoulou: *Situational awareness and interpersonal spatial processing in martial artists*
- 18:10-18:30** Balconi & Crivelli: *The "emotional" and "interpersonal" body in spatial cognition*
- 18:30-18:50** Frassinetti et al.: *The effect of perspective-taking and personal space regulation in autism.*
- 18:50-19:10** Iachini, Pagliaro et al.: *I do not have a good impression: Moral information and spatial behavior in virtual interactions*

Aula IV

SYMPOSIUM 21

Should We Stay Or Should We Go? Evidence from Lab and Field Studies of Convergent Strategies in Spatial Decision-Making by Nonhuman Primates

Convenors: Dolins & Garber

- Garber & Bicca-Marques: *Experimental field study of social and spatial foraging strategies in wild tamarins*
- Howard et al.: *Spatial and Temporal Nodes in the Paths of Bearded Capuchin Monkeys (*Sapajus libidinosus*) and the Effects of Landscape*
- Teichroeb: *The role of competition on individual routing decisions: Lessons from foraging experiments on wild vervet monkeys*
- De Lillo & Kirby: *Monitoring of spatio-temporal patterns of resource availability by humans in a virtual reality foraging task*
- Dolins et al.: *Chimpanzee goal-directed foraging and navigation in a virtual environment: spatial knowledge, distance, or sight of goal as prioritizing factor?*
- Kirby & De Lillo: *Visual cues, predictive of food location, do not override the acquisition of spatial information in humans in a virtual reality foraging task*

Aula VII

TALK SESSION 10

Attention and Perception

- Holloway & Smith: *Probability cueing in virtual environmental search*
- Nicholls & Lew: *Numerical spatial cognition and time: The association may be a product of response bias*
- Quetard et al.: *Detecting a pedestrian in the fog: The role of target expectation and visual exploration in perceptual decision making under uncertainty*
- von Stülpnagel: *Configurational salience of landmarks - An analysis of sketch maps using Space Syntax*
- Zaman & Litman-Cleper: *Space First: A Spatial Inference Model for Multi-sensory Perception*

Friday, September 11

Aula III

SYMPOSIUM 22

Numbers in the eye of the beholder: What eye movements reveal about numerical cognition

Convenors: Hartmann & Fischer

8:30-8:50

Van 't Noordende, van Hoogmoed et al.: *Using eye tracking to measure number line estimation strategies in children with mathematical difficulties*

8:50-9:10

Reinert et al.: *Strategies in unbounded number line estimation? - Evidence from eye-tracking*

9:10-9:30

Burr et al.: *Serial dependencies cause logarithmic-like compression of the numberline*

9:30-9:50

Hartmann & Fischer: *Spatial biases during mental arithmetic – Evidence from eye tracking*

9:50-10:10

Myachykov & Chapman: *The interplay between remembered affordances and the perceived numbers: An eye-tracking study*

Aula IV

SYMPOSIUM 23

Embodied space in architecture and neuroscience: measures and mechanisms

Convenors: Serino & Pasqualini

Gattara & Gallese: *The space around our workplace. The notion of embodiment within the everyday office environment*

Rooney et al.: *Peripheral extension and central projection: Two forms of embodiment through the dorsal and ventral streams of vision*

Vecchiato et al.: *Neurophysiological correlates of embodiment and motivational factors during the perception of virtual architectural environments*

Pasqualini et al.: *Bodies and Objects: Biofeedback response from architectonic experience*

Aula VII

TALK SESSION 11

Body and Space 2

Hugues et al.: *Long lasting reduction of postural asymmetry by prism adaptation after right brain lesion. A pilot study*

Muffato et al.: *Age-related differences in pointing accuracy in new and familiar environments*

Ruiz Fernandez et al.: *Flex to the left, extend to the right: Disambiguating motor and spatial influences on valence judgements*

Stevens et al.: *Thoughts in space: On quantifying the impact of environmental surround on cognitive processing*

Szpak et al.: *Too close for comfort: The effect of interpersonal proximity on spatial attention.*

COFFEE BREAK (Aula VIII, 10:10-10:40)

SYMPOSIUM 24

Number-space association: Insights from developmental, clinical and neuropsychological perspectives

Convenors: Arend & Ashkenazi

10:40-11:00

Van't Noordende, Kroesbergen et al.: *The relation between early math skill, memory and non-symbolic number-space mapping*

11:00-11:20

Ashkenazi: *Domain-specific and domain-general effects on arithmetic: Evidences from typical and atypical development*

11:20-11:40

Rinaldi: *Situating numbers on an experienced space*

11:40-12:00

Arend: *Number-space association in synaesthesia: An fMRI investigation*

TALK SESSION 12

Affordances

Belardinelli & Butz: *Planning with the eyes: End state comfort effects in gaze behaviour*

Kostov & Janyan: *Reversing the affordance effect: Negative stimulus-response compatibility observed with images of graspable objects*

Saccone et al.: *Abstract spatial coding and affordance influences on the object handle orientation effect*

Vishton et al.: *How Preparation to Touch or Grasp Alters Visual Size Perception*

TALK SESSION 13

Spatial skills and techniques

Escobar et al.: *An operational method to integrate cognitive and actual distances in a GIS street network*

Kornkasem & Black: *Formation of Spatial Thinking Skills Through Different Training Methods*

Luini et al.: *Socio-Spatial Intelligence: Social Media and Spatial Cognition for Territorial Behavioral Analysis*

Moritz et al.: *Adapting map organization to task requirements: How epistemic action facilitates map use*

Aula III

Aula IV

Aula VII

12:00-13:20

POSTER SESSION 4 *Attention and Perception 2*

1. Bourrelly et al.: *Perception of affordances during long-term exposure to weightlessness in the International Space Station*
2. Churches et al.: *Perceptual biases in the horizontal and vertical dimensions are driven by separate cognitive mechanisms*
3. Di Luca & Schiltz: *Contextual vs. numeric visuo-spatial reorientation during cancellation tasks*
4. Iachini, Ruggiero et al.: *The influence of anxiety and personality factors on comfort and reachability space: A correlational study*
5. Le Bigot & Postollec: *Effect of nearby hand on visual processing in a 3D virtual environment*
6. Marichal et al.: *Embodiment of peripersonal space perception: Does the level of phobia influence reachability judgments?*
7. Nagy: *Differences between right and left brain-damaged patients in perception of body position*
8. Nikitatis et al.: *Sustained Attention in Smart Transformable Environments*

POSTER SESSION 5 *Representation & Memory 2*

1. Siki & Svatonova: *Long-term memory for aerial photographs and maps*
2. Fiori et al.: *The right TPJ plays an active role in maintaining an internal representation of verticality: An interferential continuous theta burst stimulation study*
3. Gerard et al.: *Architecture and Spatial Cognition to Enhance Learning*
4. Kasek: *Visual expertise in immediate spatial localisation tasks*
5. Kojima: *Prior knowledge of character locational stereotypes and representations during text comprehension*
6. Li et al.: *Memory and visual search in immersive environments*
7. Marmolejo-Ramos, Montoro et al.: *The mapping of emotion words onto space: A cross-modal study*
8. Palleschi et al.: *The ability of visuospatial orientation: Similarities and differences*
9. Ruggiero, Ruotolo et al.: *Switching frames of reference: Congenital blindness limits the allocentric to egocentric translation*

POSTER SESSION 6 *Movement, Action & Navigation 2*

1. Bortolotti et al.: *Case study in rehabilitation with SAM method (Sense and Mind): A proposal and analysis*
2. Cortesi et al.: *Execution, observation and mental simulation of Upper Limb Gesture for transitive and intransitive action: A fNIRS study*
3. Dudschig & Kaup: *To fly or not to fly? The automatic influence of negation on language-space associations*
4. Kirby & De Lillo: *Chunking by food type and spatial constraints in a virtual reality search task*
5. Lopez et al.: *Coupled filtering in visual and motor spaces for reaching and grasping*
6. Ngo et al.: *The Relation between Navigation Strategy and Associative Memory: An Individual Differences Approach*
7. Quinton & Lengagne: *Abstract planning over control primitives for robotic manipulation*
8. Redhead & Allison: *Effects of Gender Stereotypic threat on a spatial orientation task in a real and virtual environment*
9. Sameer & Bhushan: *Route Memory in an Unfamiliar Homogenous Environment*
10. Sosson et al.: *Does body motion influence arithmetic problem solving?*
11. Spinelli et al.: *Is Error monitoring a graded or an all-or-none process? An EEG study in Immersive Virtual Reality*

LUNCH BREAK
(Aula VII & VIII, 13:30-15:00)

KEYNOTE LECTURE
(Aula Magna, 15:00-16:20)

William J. Clancey:
Spatial Conception of Activities: A Socio-Cognitive Perspective for Simulating Work Practices

Aula III

SYMPOSIUM 25
Language, action and space
Convenors: Borghi & Tummolini

- 16:50-17:10** Diessel: *Linguistic relativity or semantic universals of space? A fresh look at spatial frames of reference*
- 17:10-17:30** Coventry: *Spatial demonstratives and perceptual space*
- 17:30-17:50** Borghi: *Perspective and bodily space in language comprehension*
- 17:50-18:10** Knoeferle: *Actions and spatially informative cues in spoken language comprehension: Evidence from eye tracking*
- 18:10-18:30** Volterra et al: *Spatial agreement in Italian sign language*
- 18:30-18:50** Cangelosi: *Embodied Language Learning in Humanoid Robots*

Aula IV

SYMPOSIUM 26
The Body in Space
Convenor: Riemer

- van der Ham: *Human navigation in real and virtual environments: the role of locomotion*
- Riemer & Wolbers: *First person perspective: A methodological constraint for path integration studies?*
- Trojan: *Body and space: Theoretical concepts and controversies*
- Torta & Trojan: *Prismatic lenses and pain*
- Fuchs: *Spatial perception of artificial hands and phantom limbs*
- Maselli: *Self-location and its relation to body ownership in full body illusions*

Aula VII

SYMPOSIUM 27
Synchronous movement, Cooperation and the Performing Arts
Convenors: Richardson & Orgs

- Richardson: *Behavioural Coordination*
- von Zimmermann: *Collective Speech and Coordinated Action*
- Cohen & Tarr: *Synchrony, Exercise and Social Bonding*
- Stevens & Leach: *Distributed Cognition and Creativity: Effects of Collaboration and Familiarity on Improvising Contemporary Dance*
- Vicary & Orgs: *Aesthetic perception of movement synchrony in dance*