

2. Detailed Conference Program

Conference site: *Faculty of Medicine and Psychology, Via dei Marsi 78, 00185 Rome*

MONDAY, SEPTEMBER 07

From 9:00 **REGISTRATION** (Entrance Hall)

11:40-12:00 **OPENING CEREMONY** (Aula Magna)

12:00-13:20 **KEYNOTE LECTURE** (Aula Magna):
Kevin O'Regan: *Constructing space: A theoretical basis for how naive artificial or biological agents can construct spatial notions*

13:20-15:00 **INAUGURAL BUFFET**

	TALK SESSION 1 (Aula III): <i>Spatial Frames and Perspectives 1</i>	TALK SESSION 2 (Aula IV): <i>Navigation 1</i>	TALK SESSION 3 (Aula VII): <i>Emotion and Space</i>
15:00-15:20	Cerles & Rousset: <i>Recollecting words while processing space: An interference paradigm</i>	Arkin et al.: <i>Using visual information for spatial advice giving in a primate-inspired autonomous robot</i>	Kumoğlu & Olguntürk: <i>The effects of correlated colour temperature on wayfinding performance and emotional reactions: A study in a virtual airport environment</i>
15:20-15:40	Freundlieb et al.: <i>Evidence for spontaneous visuospatial perspective-taking during social interactions</i>	Epstein et al.: <i>Spatial Abstraction for Autonomous Robot Navigation</i>	Liang et al.: <i>Effects of emotional states on temporal order thresholds</i>
15:40-16:00	Papadopoulou: <i>The Architect's Perspective on the Tour and Map Perspective</i>	Macagno et al.: <i>Using 3D Immersive Virtual Environments to Monitor Human Navigation in a Human Analog of the Morris Water Navigation Task: The VE-HuNT System</i>	Luce & Carter: <i>Positive it is this way? The role of mood on global versus local landmark use within virtual environments</i>
16:00-16:20	Sugimoto et al.: <i>The effect of understandability on wayfinding through survey- and route-based expressions</i>	Pouliquen-Lardy et al.: <i>Virtual Collaboration: Effect of spatial configuration on spatial statements production</i>	Marmolejo-Ramos, Correa et al.: <i>The place of joy, surprise and sadness in vertical space</i>

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

SYMPOSIUM 1 (Aula III):

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 (Aula IV):

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 (Aula VII):

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

SYMPOSIUM 3 (Aula III):
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*

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

SYMPOSIUM 6 (Aula III):
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 4 (Aula IV):
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*

SYMPOSIUM 7 (Aula IV):
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?*

SYMPOSIUM 5 (Aula VII):
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*

TALK SESSION 5 (Aula VII):
Language and space

- Catricalà & Guidi: *Onomatopoeias and ideophones: A new study about the interface between space, image schemas and phoneme clusters*
- Cerqueglini: *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 POSTER SESSION 1 (Aula III):
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. von Stülpnagel: *Configurational salience of landmarks - An analysis of sketch maps using Space Syntax*
11. Yang et al.: *Spatial orienting around the fovea: Exogenous and endogenous cueing effects*

**POSTER SESSION 2 (Aula IV)
Representation & Memory 1**

1. Borgo & Stufano: *Understanding architectural types*
2. 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*
3. Cerles et al.: *An implicit spatial memory alignment effect*
4. Dutriaux & Gyselinck: *Posture and imagery in the memory of manipulable objects*
5. Georges et al.: *The link between number-space associations and visuospatial abilities depends on cognitive style*
6. Janyan et al.: *Remember down, look down, read up: Does a word modulate eye trajectory away from remembered location?*
7. Kluss et al.: *Representation of Impossible Worlds in the Cognitive Map*
8. Li & Zhao: *The Choice of Intrinsic Axis under Multi-cue Conditions*
9. Lilla & Delogu: *Where was it? Object location memory depends on sensory modality*
10. Maier et al.: *Cultural spatial biases: Number generation is influenced by reading direction*
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*

**POSTER SESSION 3 (Aula VII)
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*
12. Spataro et al.: *Do pointing movements facilitate the recall of serial positions in visuospatial working memory?*

13:20-15:00 LUNCH BREAK (Aula VII & VIII)

**15:00-16:20 KEYNOTE LECTURE (Aula Magna):
Vittorio Gallese: *Embodied simulation and the space around us: The perspective of cognitive neuroscience***

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

SYMPOSIUM 8 (Aula III):
Motor perspectives on social interaction
Convenor: Gianelli

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

TALK SESSION 6 (Aula VII):
Space concepts

16:50-17:10 D'Ausilio et al.: *Sensorimotor information flow in interacting partners*

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

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

17:10-17:30 Sartori et al.: *Complementary Actions: Novel perspectives*

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

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

17:30-17:50 Quesque et al.: *Perceiving social intention in motor actions at the second-person perspective*

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

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

17:50-18:10 Reader & Holmes: *Keeping social interaction social: New kinematic methods and analyses for improving validity*

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

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

18:10-18:30 Letesson et al.: *Eye contact during action observation triggers allocentric action representation*

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

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

18:30-18:50

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

Zaman & Litman-Cleper: *Space First: A Spatial Inference Model for Multi-sensory Perception*

WEDNESDAY, SEPTEMBER 09

SYMPOSIUM 10 (Aula III): Neurocomputational Approaches to Spatio-temporal Attention Convenors: Simione & 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** Simione & 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*

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

SYMPOSIUM 13 (Aula III): "Fictive Motion" and Situated Cognition: How to Resolve the Tension? Convenors: Zlatev & Fagard

- 10:40-11:00** Blomberg & Zlatev: *Non-actual motion: Phenomenological analysis and linguistic evidence*
- 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** Pajunen & Itkonen: *Eliciting different perspectives upon fictive motion: Evidence from Finnish*
- 11:40-12:00** Ekstrom et al.: *The expression of Non-Actual Motion in Swedish Sign Language*

SYMPOSIUM 11 (Aula IV): 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*

TALK SESSION 7 (Aula IV): 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*

SYMPOSIUM 12 (Aula VII): 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 "orienteering": Comparing the visuospatial abilities and environment representations of individuals with and without orienteering experience*
- van der Ham & van Stralen: *Left right confusion: effects of strategy*
- Meilinger, Rebane et al.: *The acquisition of survey knowledge through navigation*

TALK SESSION 8 (Aula VII): 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*

12:00-13:20 **KEYNOTE LECTURE** (Aula Magna):
Yan Bao: *Spatial attention is eccentricity dependent: Where something is, matters!*

13:20-15:00 **LUNCH BREAK** (Aula VII & VIII)

15:00-16:20 **KEYNOTE LECTURE** (Aula Magna):
Susan Goldin-Meadow: *How our hands help us spatialize*

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

SYMPOSIUM 14 (Aula III):
Spatial Language and Spatial Cognition
Convenor: Gentner

ECONA MEETING (Aula IV, 17:00)

FILM (Aula VII, 17:00):
Personality in mental space,
by Gerrit A. C. Derks

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*

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

THURSDAY, SEPTEMBER 10

	<p>SYMPOSIUM 15 (Aula III): <i>Architectural psychology and inhabited spaces: A multidisciplinary approach to improve quality of life</i> Convenor: Pazzaglia</p>	<p>SYMPOSIUM 16 (Aula IV): <i>The Quiet Eye As an Objective Measure of Situated and/or Spatial Cognition</i> Convenor: Vickers</p>	<p>SYMPOSIUM 17 (Aula VII): <i>Multimodal perspectives on spatial cognition</i> Convenor: Forbus</p>
8:30-8:50	Pazzaglia: <i>New challenges for architectural psychology</i>	Causer et al.: <i>Developing spatial cognition through the identification and training of visual attention in surgical skills</i>	
8:50-9:10	Bonaiuto & Fornara: <i>Urban environment and well-being</i>	Klostermann et al.: <i>The Quiet Eye and Information Processing: Facilitation of Stimulus Identification and Response Selection</i>	Cohn: <i>Learning about space, time and activities from a robot perspective</i>
9:10-9:30	Siviero: <i>Footbridges as elements for Urban Rehabilitation and Renewal</i>	Wilson et al.: <i>"Use your illusion II": Influencing spatial cognition and action.</i>	Freksa: <i>Computational problem solving in spatial substrates</i>
9:30-9:50	Culatti: <i>Bridges in the landscape: Qualitative aspects</i>	Gonzales et al.: <i>Quiet eye duration in expert and novice archers: A task complexity dichotomy</i>	Pustejovsky: <i>Affordances and the functional characterization of space</i>
9:50-10:10	O'Malley et al.: <i>Reducing spatial disorientation for older adults with memory difficulties: Towards dementia-friendly architecture</i>	Vine et al.: <i>Blink and you might miss it: Blinks may reflect an inward shift of attention, during the performance of a skill</i>	Forbus: <i>Sketching our way to spatial learning</i>
10:10-10:40	COFFEE BREAK (Aula VIII)		
	<p>SYMPOSIUM 18 (Aula III): <i>Situated cognition in the arts</i> Convenors: Reboul & Guelton</p>	<p>SYMPOSIUM 19 (Aula IV): <i>Eye movement-related brain activity in visuospatial information processing</i> Convenors: Nikolaev & van Leeuwen</p>	<p>TALK SESSION 9 (Aula VII): <i>Navigation 2</i></p>
10:40-11:00	Reboul: <i>Decoupling, situated cognition and immersion in art</i>	Pannasch: <i>Eye movement-related brain activity in free visual exploration</i>	Burgmanis et al.: <i>The influence of travel behavior on cognition of urban environment</i>
11:00-11:20	Trentini: <i>Immersion as an embodied cognition shift: Aesthetic experience and spatial situated cognition</i>	Nakatani et al.: <i>Perceivers' internal state tags fixation-by-fixation visual information: An EEG-eye movement co-registration study</i>	Claessen et al.: <i>The effect of instruction on the spatial and temporal aspects of route knowledge</i>
11:20-11:40	Ganczarek et al.: <i>Intersection of Reality and Fiction in Art Perception</i>	Ossandon et al.: <i>Predictions of visual content across eye movements and their modulation by inferred Information</i>	Nardi et al.: <i>More on the Ability to Use Slope for Navigation: Evidence From Children</i>
11:40-12:00	Guelton: <i>« Hupareel »: experiences & immersions in an Hybrid Reality Game between Paris – Shanghai – Montreal</i>	Nikolaev & van Leeuwen: <i>Encoding of visuospatial information in free viewing</i>	Smith et al.: <i>Developmental trajectories of path integration: The influence of concurrent task</i>

- 12:00-13:20** **KEYNOTE LECTURE** (Aula Magna):
Shaun Gallagher: *Intersubjective relations in lived space and instituted space*
- 13:20-15:00** **LUNCH BREAK** (Aula VII & VIII)
- 15:00-16:20** **KEYNOTE LECTURE** (Aula Magna):
Sergei Gepshtein: *Solid field of sensitivity: Perceptual structure of immersive space*
- 16:20-16:50** **TEA BREAK** (Aula VIII)

SYMPOSIUM 20 (Aula III):
Situated spatial cognition and social processing: body, emotions and interactions in space
 Convenor: Iachini

SYMPOSIUM 21 (Aula IV):
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

TALK SESSION 10 (Aula VII):
Attention and Perception

- | | | | |
|--------------------|--|--|---|
| 16:50-17:10 | Saulton et al.: <i>The interaction of social and spatial cognitive processes in naturalistic social interactions</i> | Garber & Bicca-Marques: <i>Experimental field study of social and spatial foraging strategies in wild tamarins</i> | Holloway & Smith: <i>Probability cueing in virtual environmental search</i> |
| 17:10-17:30 | Tajadura-Jimenez: <i>The Hearing Body: Influences of audition on body and space representations</i> | Howard et al.: <i>Spatial and Temporal Nodes in the Paths of Bearded Capuchin Monkeys (<i>Sapajus libidinosus</i>) and the Effects of Landscape</i> | Nicholls & Lew: <i>Numerical spatial cognition and time: The association may be a product of response bias</i> |
| 17:30-17:50 | Coello et al.: <i>The motor encoding of peripersonal space and its role in social interactions</i> | Teichroeb: <i>The role of competition on individual routing decisions: Lessons from foraging experiments on wild vervet monkeys</i> | Quetard et al.: <i>Detecting a pedestrian in the fog: The role of target expectation and visual exploration in perceptual decision making under uncertainty</i> |
| 17:50-18:10 | Lloyd & Koutsopoulou: <i>Situational awareness and interpersonal spatial processing in martial artists</i> | De Lillo & Kirby: <i>Monitoring of spatio-temporal patterns of resource availability by humans in a virtual reality foraging task</i> | |
| 18:10-18:30 | Balconi & Crivelli: <i>The "emotional" and "interpersonal" body in spatial cognition</i> | Dolins et al.: <i>Chimpanzee goal-directed foraging and navigation in a virtual environment: spatial knowledge, distance, or sight of goal as prioritizing factor?</i> | |
| 18:30-18:50 | Frassinetti et al.: <i>The effect of perspective-taking and personal space regulation in autism.</i> | Kirby & De Lillo: <i>Visual cues, predictive of food location, do not override the acquisition of spatial information in humans in a virtual reality foraging task</i> | |
| 18:50-19:10 | Iachini, Pagliaro et al.: <i>I do not have a good impression: Moral information and spatial behavior in virtual interactions</i> | | |

FRIDAY, SEPTEMBER 11

SYMPOSIUM 22 (Aula III): *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*

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

SYMPOSIUM 24 (Aula III): *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*

SYMPOSIUM 23 (Aula IV): *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*

TALK SESSION 12 (Aula IV): *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 11 (Aula VII): *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.*

TALK SESSION 13 (Aula VII): *Spatial skills and techniques*

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

**12:00-13:20 POSTER SESSION 4 (Aula III):
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 (Aula IV):
Representation & Memory 2**

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

**POSTER SESSION 6 (Aula VII):
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*

13:20-15:00 LUNCH BREAK (Aula VII & VIII)

**15:00-16:20 KEYNOTE LECTURE (Aula Magna):
William J. Clancey: *Spatial Conception of Activities: A Socio-Cognitive Perspective for Simulating Work Practices***

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

SYMPOSIUM 25 (Aula III):
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*

SYMPOSIUM 26 (Aula IV):
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*

SYMPOSIUM 27 (Aula VII):
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*