



**Spatial Cognition 2008**  
Preliminary Program

7. August 2008

	Mon, Sep 15, 2008	Tue, Sep 16, 2008	Wed, Sep 17, 2008	Thu, Sep 18, 2008	Fri, Sep 19, 2008		
8:30							
9:00	Tutorial [T-2]	Keynote Lecture	Keynote Lecture	Keynote Lecture			
9:30	Tutorial [T-3]	Technical Papers	Technical Papers	Technical Papers			
10:00					Doctoral Colloquium		
10:30	Coffee Break						
11:00	Tutorial [T-2]	Technical Papers	Technical Papers	Technical Papers	Workshop [WS-1]		
11:30	Tutorial [T-3]	Technical Papers	Technical Papers	Technical Papers	Workshop [WS-3]		
12:00					Workshop [WS-4]		
12:30							
13:00	Lunch Break						
14:00			Excursion				
14:30	Ind. Tutorial [IT-1]	Technical Papers				Technical Papers	Technical Papers
15:00	Tutorial [T-1]	Technical Papers				Technical Papers	Technical Papers
15:30	Workshop [WS-2]						Workshop [WS-4]
16:00	Coffee Break						
16:30	Ind. Tutorial [IT-1]	Technical Papers	Dinner				
17:00	Tutorial [T-1]	Technical Papers				Plenary Discussion	Workshop [WS-3]
17:30	Workshop [WS-2]						Workshop [WS-4]
18:30	Dinner						
20:00	Welcome Reception, Dinner	Poster Session	Doctoral Colloquium				

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**Monday, Sep 15, 2008**

**Tutorial T-2 (9:00 – 13:00)**

Alexander Klippel (Penn State U, USA). *Behavioral Similarity Measures for Spatial Cognition*

**Tutorial T-3 (9:00 – 13:00)**

Marco Ragni (U of Freiburg, D). *Qualitative Spatial and Temporal Reasoning: Formal Aspects and Cognitive Theories*

\*\*\* Lunch Break

**Tutorial T-1 (14:00 – 18:00)**

Kenneth D. Forbus (Northwestern U, USA). *Exploring Spatial Cognition through Sketch Understanding*

**Industrial Tutorial IT-1 (14:00 – 18:00)**

Niels Krabisch (ESRI Geoinformatik GmbH, D). *Visualization and Spatial Statistics with ArcGIS*

**Workshop WS-2 (14:00 – 18:00)**

Marco Ragni (U of Freiburg, D), Holger Schultheis (U of Bremen, D), and Thomas Barkowsky (U of Bremen, D). *Cognitive and Computational Models of Human Spatial Reasoning*

**Welcome Reception (19:00)**

\*\*\* Dinner

**Tuesday, Sep 16, 2008****Keynote Lecture (8:30 – 9:30)**

Heinrich H. Bülthoff (MPI for Biological Cybernetics, D): *TBA*.

**Spatial Orientation (9:30 – 10:30)**

Marios Avraamides and Stephanie Pantelidou: *Does body orientation matter when reasoning about depicted or described scenes?*.

Jonathan Kelly and Timothy P. McNamara: *Spatial memory and spatial orientation*.

\*\*\* Coffee Break

**Spatial Navigation (11:00 – 13:00)**

Louis-Emmanuel Martinet, Jean-Baptiste Passot, Benjamin Fouque, Jean-Arcady Meyer, and Angelo Arleo: *Map-based spatial navigation: A cortical column model for action planning*.

Thomas Reineking, Christian Kohlhagen, and Christoph Zetsche: *Efficient wayfinding in hierarchically regionalized spatial environments*.

Laurent Dollé, Mehdi Khamassi, Benoît Girard, Agnès Guillot, and Ricardo Chavarriaga: *Analyzing interactions between navigation strategies using a computational model of action selection*.

Lorenz Gerstmayr, Hanspeter Mallot, and Jan Wiener: *A minimalistic model of visually guided obstacle avoidance and path selection behavior*.

\*\*\* Lunch Break

**Spatial Learning (14:30 – 16:00)**

Rebecca Hurlbaus, Kai Basten, Hanspeter A. Mallot, and Jan M. Wiener: *Route learning strategies in a virtual cluttered environment*.

Nicholas Giudice and Jerome Tietz: *Learning with virtual verbal displays: Effects of interface fidelity on cognitive map development*.

Drew Dara-Abrams: *Cognitive surveying: A framework for mobile data collection, analysis, and visualization of spatial knowledge and navigation practices*.

\*\*\* Coffee Break

**Maps & Modalities (16:30 – 18:00)**

Kai-Florian Richter, Denise Peters, Gregory Kuhnmünch, and Falko Schmid: *What do focus maps focus on?*.

Lynn S. Liben, Lauren J. Myers, and Kim A. Kastens: *Locating oneself on a map in relation to person qualities and map characteristics*.

Madeleine Keehner: *Conflicting cues from vision and touch can impair spatial task performance: Speculations on the role of spatial ability in reconciling frames of reference*.

\*\*\* Dinner

**Poster Session (20:00 – 21:30)**

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## Wednesday, Sep 17, 2008

### Keynote Lecture (8:30 – 9:30)

Laura Carlson (U of Notre Dame, USA): *On the “whats” and “hows” of “where”: The role of salience in spatial descriptions.*

### Spatial Communication (9:30 – 10:30)

Kim Kastens, Lynn S. Liben, and Shruti Agrawal: *Epistemic actions in science education.*

Michael Barclay and Antony Galton: *An influence model for reference object selection in spatially locative phrases.*

\*\*\* Coffee Break

### Spatial Language (11:00 – 13:00)

Robert Ross: *Tiered models of spatial language interpretation.*

Juliana Goschler, Elena Andonova, and Robert Ross: *Perspective use and perspective shift in spatial dialogue.*

Joana Hois and Oliver Kutz: *Natural language meets spatial calculi.*

Kate Lockwood, Andrew Lovett, and Kenneth Forbus: *Automatic classification of containment and support spatial relations in English and Dutch.*

### Excursion & Conference Dinner (14:00)

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**Thursday, Sep 18, 2008****Keynote Lecture (8:30 – 9:30)**

Dedre Gentner (Northwestern U, USA): *Learning about space.*

**Similarity & Abstraction (9:30 – 10:30)**

Konstantinos Nedas and Max Egenhofer: *Integral vs. separable attributes in spatial similarity assessments.*

Lutz Frommberger and Diedrich Wolter: *Spatial abstraction: Aspectualization, coarsening, and conceptual classification.*

\*\*\* Coffee Break

**Concepts & Reference Frames (11:00 – 13:00)**

Martin Raubal: *Representing concepts in time.*

Tobias Meilinger: *The network of reference frames theory: A synthesis of graphs and cognitive maps.*

Peter Kiefer: *Spatially constrained grammars for mobile intention recognition.*

Andrew Lovett, Kate Lockwood, and Kenneth Forbus: *Modeling cross-cultural performance on the visual oddity task.*

\*\*\* Lunch Break

**Spatial Modelling & Spatial Reasoning (14:30 – 16:00)**

Hannah Dee, Roberto Fraile, David C. Hogg, and Anthony Cohn: *Modelling scenes using the activity within them.*

Antony Galton: *Pareto-optimality of cognitively preferred polygonal hulls for dot patterns.*

Dominik Luecke, Till Mossakowski, and Diedrich Wolter: *Qualitative reasoning about convex relations.*

\*\*\* Coffee Break

**Panel discussion (16:30 – 18:00)**

\*\*\* Dinner

**Doctoral Colloquium I (20:00 – 21:30)**

**Friday, Sep 19, 2008****Doctoral Colloquium II (9:00 – 10:30)**

\*\*\* Coffee Break

**Workshop WS-1 (11:00 – 13:00)**

Alexander Klippel (Penn State U, USA) and Stephen Hirtle (U of Pittsburgh, PA, USA). *You-Are-Here-Maps: Creating a Sense of Place through Map-like Representations*

**Workshop WS-3 (11:00 – 13:00)**

Kenny Coventry (Northumbria U, UK) and Ronan O’Ceallaigh (Northumbria U, UK). *Spatial Language in Context: Computational and Theoretical Approaches to Situation Specific Meaning*

**Workshop WS-4 (11:00 – 13:00)**

Wolfgang Stürzl (U of Bielefeld, D) and Jan M. Wiener (U of Freiburg, D). *Biologically Motivated Models of Spatial Behaviour: Insights from Animals*

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