

First Call for Papers
12th International Symposium of Cognition, Logic and Communication
Impact of Visuospatial Skills on Learning
Symposium and Workshop
at the Laboratory for Perceptual and Cognitive Systems, Faculty of Computing, University of Latvia,
Riga, Latvia October 31, November 1, 2017

Co-Organizers: Faculty of Computing & Faculty of Business, Management and Economics University of Latvia

According to recent evidence from psychology and learning science visuospatial skills are critical components in learning and might be a significant predictor of success in learning. Furthermore, external visuospatial representations scaffold variety of internal processes of reasoning ranging from everyday tasks to highly complex processes.

This symposium will focus on the following topics (but are not limited to):

- a. Impact of visuospatial skills on the processes of learning in STEM fields
- b. The nature and dynamics of visuospatial skills and their place in the larger context of cognitive processes
- c. The role of visualizations in cognitive processes as scaffolding tools and expressive media.
- d. Visuospatial reasoning, its semantics, qualitative and quantitative representation.
- e. Verbal and nonverbal processes in visuospatial reasoning
- f. Visuospatial processes in logic and formal sciences

We welcome contributions from fields including cognitive science, psychology, learning science, linguistics, computer science, and philosophy.

Interdisciplinary contributions are especially welcome.

2-page anonymous abstracts (12 point) for a talk of 30 minutes (+10 minutes discussion) should be submitted **by September 15** by sending them to lpcs@lu.lv with 'Paper Riga 2014' on the subject line.

Submissions have to be prepared as pdf files.

A limited number of papers will be selected for presentation at the symposium and considered for inclusion in the proceedings in the Baltic International Yearbook of Cognition, Logic and Communication

(<http://newprairiepress.org/biyclc/>; instructions:

<http://newprairiepress.org/biyclc/policies.html>) or Baltic Journal of

Modern Computing (<http://www.bjmc.lu.lv/instructions-to-authors/>)

Keynote speakers (alphabetically):

Bob Coecke, Department of Computer Science, University of Oxford, UK

Mike Stieff, Department of Chemistry, Learning Sciences Research Institute
University of Illinois-Chicago, IL, USA

David H. Uttal, School of Education and Social Policy & Department of Psychology
Northwestern University, Evanston, IL, USA

Program Committee:

Andris Ambainis, University of Latvia, Riga, Latvia

Ivars Austers, University of Latvia, Riga, Latvia

Signe Bāliņa, University of Latvia, Riga, Latvia

Juris Borzovs, University of Latvia, Riga, Latvia

Michael Glanzberg, Northwestern University, USA

Nora Newcombe, Temple University, USA

Susan Rothstein, Bar-Ilan University, Israel

Jurgis Šķilters, University of Latvia, Riga, Latvia

David Uttal, Northwestern University, USA

Yoad Winter, Utrecht University, The Netherlands

Joost Zwarts, Utrecht University, The Netherlands

Support: University of Latvia Foundation, ACCENTURE.

Additional information:

lpcs@lu.lv or jurgis.skilters@lu.lv

<http://www.lpcs.lu.lv/>