

Cognitive Process in Geometry

VEGA 1/0440/15

Tuesday 21/06/2016

room CS10

10.00 - 10.30 **The opening Ceremony "Cognitive Process in Geometry"**
Welcome speech of the Dean of the Faculty of Education, CU in Ružomberok

The chair: Oliver Židek

10.30 - 11.45 František Kuřina
Geometry as a pedagogical problem

11.45 - 13.00 *Lunch*

room A201

The chair: Ján Gunčaga

13.00 - 14.00 Asuman Duatepe-Paksu
Paper folding: A tool in teaching quadrilaterals with the perspective of symmetry

The chair: Ewa Swoboda

14.00 - 14.20 Michaela Kaslová
Combinatory activities in (pre-)geometry

14.20 - 14.40 Edita Partová, Katarína Žilková
Reasoning of pre-school children about the position and the design of shapes

14.40 - 15.00 Marta Pytlak
The first grade students from primary school create geometric puzzle

15.00 - 15.30 *Coffee break*

Tuesday 21/06/2016

I. section (room A201)

The chair: Štefan Tkačik

- 15.30 - 15.50** Gabriela Pavlovičová, Valéria Švecová, Lucia Klimentová
Geometrical conceptions and the understanding of fraction as a part of whole
- 15.50 - 16.10** Ľubica Gerová
Geometric ideas of future teachers for pre-primary and primary education
- 16.10 - 16.30** Ján Gunčaga, Martina Vinklárková, Jozef Zentko
Supporting of understanding of selected geometric concepts using the methodological approach of Franc Močnik
- 16.30 - 16.50** David Nocar, Tomáš Zdráhal
Visualization of specific sets of points of conic sections using the tools of dynamic geometry
- 16.50 - 17.10** Viera Uherčíková, Peter Vankúš
Analysis of tasks supporting cognitive process in geometry in the life-long education of kindergarten teachers
- 17.10 - 17.30** Zuzana Malacká
Geometric imagination of students in solving two linear equations or inequalities with two unknowns
- 18.30 - 24.00** *The social evening*

Wednesday 22/06/2016

room A201

The chair: Jaroslav Perný

- 13.00 - 13.20** Irena Budínová
Developing the Conceptions of the Notion Square at Elementary School
- 13.20 - 13.40** Janka Kopáčová, Katarína Žilková
Conceptions and misconceptions of pupils about rectangles
- 13.40 - 14.00** Ingrid Alföldyová, Veronika Palková
Task from geometry within Testing 5-2015
- 14.00 - 14.20** Štefan Tkačik, Katarína Žilková
Geometric misconceptions of 15-year-old pupils about quadrilaterals
- 14.20 - 14.45** *The End of the Conference a Coffee break*
- 14.45 - 17.00** *Okrúhly stôl a pracovné stretnutie riešiteľov projektu*
1. Reflexia rozvíjania geometrického myslenia v matematickej edukácii.
2. Rozsah, obsah a kontinuita geometrického učiva v ŠVP.
3. Formulácia záverov a odporúčaní.
4. Pracovné stretnutie riešiteľov projektu VEGA 1/0440/15.

Wednesday 22/06/2016

room A201

The chair: Oliver Židek

08.30 - 09.30 Ewa Swoboda
Dynamic geometrical reasoning

The chair: Iveta Scholtzová

09.30 - 10.30 Jaroslav Perný
Manual and mental manipulation with objects and development of geometrical imagination

10.30 - 10.50 *Coffee break*

The chair: Edita Partová

10.50 - 11.10 Miklós Hoffmann
How to measure spatial abilities and what are the consequences?

11.10 - 11.30 Alenka Lipovec, Manja Podgoršek
Misconceptions of primary pre-service teachers regarding interior of 2D shapes

11.30 - 11.50 Marek Mokriš, Iveta Scholtzová
Misconceptions of elementary teacher trainees in the identification of plane geometric figure

11.50 - 12.10 Barbara Nawolska
What students of pedagogy know about quadrilaterals?

12.10 - 13.00 *Lunch*

Tuesday 21/06/2016

II. section (room A244)

The chair: Marek Mokriš

- 15.30 - 15.50** Pavol Hanzel, Patrik Voštinár
GeoGebra and Graph theory in LMS MOODLE
- 15.50 - 16.10** Rostislav Miarka, Pavel Smolka
E-learning as a tool for support of teaching geometry
- 16.10 - 16.30** Dalibor Gonda
Construction of concepts: directional and normal vector of line in analytic geometry
- 16.30 - 16.50** Jan Wossala
Tablets and CLIL in Geometry lessons
- 16.50 - 17.10** Ede M. Troll
Caustic Curves – Higher Mathematics Outside Higher Education
- 17.10 - 17.30** Lucia Csachová
The Axis of Symmetry of the Pair of Points and the Construction of one Special Structure
- 18.30 - 24.00** *The social evening*