

PROGRAMME
13th Polish-Czech-Slovak Mathematical School
KRAKÓW - DOBCZYCE - JAŁOWCOWA GÓRA

8th-10th June 2006

15⁰⁰ – 15²⁵ Opening

CONFERENCE HALL 1

Section: Theory of Training Teachers of Mathematics

Thursday, June 8, 2006

- 15³⁰ – 16⁵⁰ **Chair: Jiří Cihlár**
Božena Rožek – *Rhythmical structure of 2D arrays identified in children's drawings*
Mirosława Sajka – *From research on using problems related to functional equations as multifunctional tools to reveal subject matter knowledge of functions in future mathematics teachers*
Jacek Jędrzejewski – *A mistake in definition of a limit of function and some consequences*
Robert Sochacki – *Some remarks on absolute value*
- 16⁵⁰ – 17³⁰ *Coffee Break*
- 17³⁰ – 18⁵⁰ **Chair: Grażyna Rygał**
Maciej Klakla – *Tasks "for forcing" in developing the mathematical activities of the students*
Roman Frič – *How big is the difference?*
Maciej Major, Barbara Nawolska – *New insights concerning the Penney's game*
Aleksandra Urbańska – *How a child builds its arithmetical knowledge?*
- 19³⁰ *Dinner*

Friday, June 9, 2006

- 8⁰⁰ – 8³⁰ *Breakfast*
- 9⁰⁰ – 10²⁰ **Chair: Jan Kopka**
Anita Balcarová, Zdeněk Pejsar – *Electronic support in Mathematics for students-teachers to primary school of the Pedagogical Faculty*
Krzysztof Mostowski – *Teaching stochastic: from concrete operation approach to full use graphic calculators*
Ingrida Kraslanová – *Teaching goniometric functions using the mathematical software Derive*
Jiří Soukup – *Didactic aspects of multimedia component in e-learning for mathematical pedagogy*
- 10²⁰ – 11⁰⁰ *Coffee Break*

- 11⁰⁰ – 12²⁰ **Chair: Roman Frič**
 Anna Rybak – *Training Teachers for Using Technology in Mathematics Teaching*
 Martina Sandanusová – *Confrontation of traditional and computer subsidize learning of function (with equation grapher)*
 Peter Vankúš – *Efficacy of teaching methods*
 Martina Uhlířová – *Elementary Teacher Attitudes towards Information and Communication Technology*
- 13⁰⁰ Lunch
- 15⁰⁰ – 16²⁰ **Chair: Josef Molnár**
 Jiří Cihlář – *Periods in the expansion of rational numbers*
 Edita Partová – *Differences in teaching of mathematics and teaching of elementary mathematics*
 Jindřiška Eberová – *On solutions of some mathematical tasks*
 Štefan Kováčik – *Textbooks Bude škola 1 and Bude škola 2 and ich verification in zero classes at elementary schools and infant schools*
- 16²⁰ – 17⁰⁰ Coffee Break
- 17⁰⁰ – 18²⁰ **Chair: Pavel Tlustý**
 Ján Ďuriš – *MCRE tasks vs. standard school tasks*
 Wacław Zawadowski – *Binary Arithmetics in Primary Grades*
 Marek Mokriš – *The innovation of mathematical curriculum in preparation of pre-elementary and elementary teachers*
 Bohumil Novák – *On some relations of motivation in teaching mathematics*
- 18³⁰ Dinner

Saturday, June 10, 2006

- 8⁰⁰ – 8³⁰ Breakfast
- 9⁰⁰ – 10²⁰ **Chair: Štefan Kováčik**
 Marta Pémová – *About the basic theorem of oblique axonometry*
 Magdalena Krátká – *Students' Understanding of the Concept of Infinity in the Geometrical Context*
 Grażyna Rygał – *Generalization of the Simpson rule*
 Zdeněk Šima – *Some forms and methods of work in mathematics. Method of "three-steps" and method of three-stage*
- 10²⁰ – 11⁰⁰ Coffee Break
- 11⁰⁰ – 12²⁰ **Chair: Maciej Klakla**
 Filip Roubíček – *Representational environments in geometry*
 Anna Stopenová – *On mathematical imagination of pre-school aged children*
 Alena Pridavková – *The Mathematical Talented Children and Their Education*
 Oliver Židek – *Didactical use of intuition in knowledge acquisition*
- 12³⁰ **Closing**
- 13⁰⁰ Lunch

CONFERENCE HALL 6
Section: Theory of Training Teachers of Mathematics
Friday, June 9, 2006

- 15⁰⁰ – 16²⁰ **Chair: Bohumil Novák**
 Jitka Hlaváčková – *Mathematics and its application in the new educational programme within the primary and lower secondary school*
 L'ubica Gerová – *Unusual mathematical problems and pupils interested in mathematics at elementary school*
 Matuš Harminc – *Some experiences with the diversity of my presentation: in word problems*
 Zuzana Juščáková – *Abilities or didactic test?*
- 16²⁰ – 17⁰⁰ *Coffee Break*
- 17⁰⁰ – 18²⁰ **Chair: Anna Stopenová**
 Jan Kopka – *Investigative Approach in School Mathematics*
 Diana Izvorska – *Mathematics models- inter-subject relations in higher mathematics course and special disciplines in economic profile*
 István Lénárt – *Teachers' Attitude Towards Comparative Geometry in a Wide-Range Pilot Project*
 Jan Melichar – *Entropy in the education of mathematics at elementary schools*
 Pavel Tlustý – *A mathematical model of card shuffling*
- 18³⁰ *Dinner*

Saturday, June 10, 2006

- 8⁰⁰ – 8³⁰ *Breakfast*
- 9⁰⁰ – 10²⁰ **Chair: Waclaw Zawadowski**
 Jana Přihonská – *Development of Combinatorial Thinking*
 Tomáš Zdráhal – *Quasiarithmetic weighted mean*
 Ondřej Moc – *Gauss's definition of gama function*
 Josef Molnár, Slavomira Schubertová – *Male and Female Space Imaginations*
- 10²⁰ – 11⁰⁰ *Coffee Break*
- 11⁰⁰ – 12²⁰ **Chair: Tomáš Zdrahál**
 Iveta Scholtzová – *Combinatorics at primary school*
 Ján Gunčaga, Štefan Tkačik – *The limit of a sequence and the limit of a function*
 Eugeniusz Śmietana – *The effectiveness of diverging interventions by a teacher in the process of solving a mathematical problem by a talented student*
 Blanka Tomkova – *Methods of developing mathematic concepts*
- 12³⁰ **Closing**
- 13⁰⁰ *Lunch*

CONFERENCE HALL 6

Section: Mathematics

Thursday, June 8, 2006

- 15³⁰ – 16⁵⁰ **Chair: Ireneusz Krech**
 Vasyl M. Fedorchuk, Volodymyr I. Fedorchuk – *On functional bases of the first-order differential invariants for non-conjugate subgroups of the Poincaré group $P(1, 4)$*
 Jurij Povstenko – *Fractional integrals and derivatives*
 Oleg Tikhonenko – *Queueing systems with common memory space*
 Małgorzata Wróbel – *Some consequences of locally defined operators (Part II)*
- 16⁵⁰ – 17³⁰ *Coffee Break*
- 17³⁰ – 18⁵⁰ **Chair: Jurij Povstenko**
 Zbigniew Powązka – *On some characterization antiderivative of a function*
 Grażyna Krech – *On boundary problems for Poisson integrals for the Hermite expansions*
 Ireneusz Krech – *Complex stochastic graph*
 Jadwiga Knop – *About some properties of i -connected sets*
 Marián Trenkler – *SUDOKU variations*
- 19³⁰ *Dinner*

Friday, June 9, 2006

- 8⁰⁰ – 8³⁰ *Breakfast*
- 9⁰⁰ – 10²⁰ **Chair: Oleg Tikhonenko**
 Daniela Bittnerová – *Parametrized Surfaces in E_3*
 Pavel Hic, Milan Pokorný – *Randomly $C_n \cup C_m$ Graphs*
 Anna Król, Paweł Drygaś – *Some remarks on domination connected with conjunctive and disjunctive operations*
 Sergey Novikov – *The estimations of the complexity of algorithms of the puzzle „The towers of Hanoi” for $k > 3$ pegs*
- 10²⁰ – 11⁰⁰ *Coffee Break*
- 11⁰⁰ – 12²⁰ **Chair: Marián Trenkler**
 Martin Papčo – *On fuzzy random maps: examples and generalizations*
 Jana Šimsová – *Recurrence relation for Fourier coefficients of spline wavelets*
 Katarzyna Troczka – *Some properties of subquadratic function and stability of the inequality defining subquadratic function*
 Marta Žambochová – *Methods for data mining with trees*
- 13⁰⁰ *Lunch*
- 18³⁰ *Dinner*

Saturday, June 10, 2006

- 8⁰⁰ – 8³⁰ *Breakfast*
- 12³⁰ **Closing**
- 13⁰⁰ *Lunch*