



12th International Conference on Multimedia in Physics Teaching and Learning

MPTL 12

13-15 September 2007

Institute of Experimental Physics
pl. Maksa Borna 9
50-204 Wrocław, Poland

This conference follows the successful workshops in Parma (2002), Prague (2003), Graz (2004), Berlin (2005) and Szeged (2006). It is on the list of official Europhysics conferences, sponsored by European Physical Society. It keeps also the general aims of the previous meetings, namely to provide for an overview and an exchange of trends, research results, new materials and experiences with regard to the use of multimedia in physics education, at the university as well as on the school levels. We have extended the topics, as it happened in Szeged, with information on the use of MM in some related scientific subjects, and also with outlook towards industrial requirements of MM methods.

Interactive poster session A

1. **Aleksandriya ALEKSANDROVA, Nadezhda NANCHEVA**
E – Test with Physics Video Demonstrations
2. **Sergey AVERKOV, Olga IGNATOVA, Alexander KAZACHKOV**
Using Animation in Excel in Order to Solve Physical Problems
3. **Włodzimierz NATORF**
Between "Paying Attention" and "Hands-on" Learning
4. **Alexander KAZACHKOV**
Animation and Virtual Experiments in Excel
5. **Jan DEGRO, Peter Marton**
Mechanical Oscillations and Waves
6. **Wojciech DOBROGOWSKI**
Markup Languages for Creation Reusable Learning Objects
7. **Marek GODLEWSKI, Marcin KLIMEK**
E-learning Course Based on Programming Learning Technique
8. **Fu-Kwun HWANG**
Enjoy the Fun of Physics with Java Simulations
9. **Jozef HANC**
Simple Quantum Approach to Electromagnetism and Optics
10. **Hermann HÄRTEL**
Use of Computer Supported Material for Better Understanding of Difficult Concepts in Physics
11. **Hansjörg JODL**
Demonstration of New RCLs
12. **Saulius BAGDONAS, V. Karenauskaite, G. Dikcius, R. Rotomskis**
Applying Innovative Technologies in the Biomedical Physics Courses for Health Care Specialists
13. **Tatjana SAPTSINA**
Homemade Experiments on Optics
14. **Marek SZYMAŃSKI, Wiesław Tłaczała, G. Grajner, M. Zaremba**
Simulated Experiments in the Virtual Nuclear Physics Laboratory
15. **Tomasz GRECZYŁO, Tadeusz Lewowski**
Ice Crystals Exhibit Great Beauty

Interactive poster session B

1. **Piroska DOMOTOR, M. Benedict**
A Multimedia Course for Teachers of Physics and Science
2. **Agnieszka CIŻMAN, Piotr GOLICZEWSKI, E.B. Radojewska, R. Poprawski**
On-line Multimedia Support for Student Experiments in Ferroelectric Physics
3. **Agnieszka DRZAZGOWSKA, Ewa KUREK**
Simulations and Visualizations in Teaching Physics and Nature at School
4. **Anna HAJDUSIANEK**
The Short Films in Teaching of Physics
5. **Miroslava OZVOLDOVA, Franz SCHAUER**
Real Interactive Physics Experiments with Data Collection and Transfer
6. **Marek GODLEWSKI, Marcin KLIMEK**
Animation as a Very Effective Multimedia Tool for Easier Explanation of Physical Phenomena
7. **Marián KIREŠ**
Analysis of the Young Physicists Tournament Problems Supported by Multimedial Tools
8. **Marcin KLIMEK, Marek GODLEWSKI, L. Pytlík**
Complementary Role of Remotely Controlled Experiment
9. **Bruce MASON**
Digital Libraries for Science Resources
10. **Maciej MATYKA**
The Soft Body under Pressure - a Simple Model of Complex Behaviour
11. **Angela MILAZZO**
Early Results About a Multimedia Material Experimentation with University Students of Calabria
12. **Grzegorz OSIŃSKI, Grzegorz Karwasz**
Multimedia Libraries in Physics Education
13. **Ksenia SUOMOLAINEN**
Educational Resource "Quantum Physics" for Students of Karelian Teachers-Training University
14. **Fernande FRISING**
Videos of Classroom Physics Demonstrations