ACCEPTED CONTRIBUTIONS

ORAL PRESENTATIONS

September, 23rd 2009 – 4.45 p.m. - 7.00 p.m. Room H, Rizzi Campus – Session 2

Track 5 **Web-environments, Internet portals, Internet on-line services for physics teaching and learning**

Presenter	*Title*	*Contribution code*
Luis De La Torre	The FisL@bs portal: a network of virtual and remote laboratories for physics education	T5_13
Marian Zelenak	SCHOLA LUDUS interactive videos - active and playful observation via recorded processes	T5_20
Ksenia Suomolaynen	Electronic educational complex Physics of nanomaterials?	T5_26
Arcadi Pejuan	An online multimedia-based course on Basic Acoustics: description and evaluation	T5_28
Giuseppina Rinaudo	An e-learning web environment for Mathematics and Physics communities of practice	T5_68
Carlo Andrea Rozzi	FisicaOndeMusica: a web environment about wave physics and musical acoustics	T5_83
Laura Fedeli	Experiential learning throigh virtual worlds: a case study in Second Life	T5_107

September, 24th 2009 – 2.30 p.m. - 4.30 p.m. Room H, Rizzi Campus – Session 5

Track 1 **Integrating MM in Physics Teaching/Learning Paths and the role of MM and computer resources, as Java applets and Physlets, to promote innovative teaching**

Presenter	*Title*	*Contribution code*
Hildegard Urban-Woldron	Innovative teaching and learning szenarios using interactive simulations	T1_7
Ewa Kedzierska	Animations - a new Coach tool for doing physics	T1_44
Zofia Golab-Meyer	Somme remarks on Polish experience in the usage of Multimedia in Physics Education. Are multimedia a powerful tool; or just only a protease of real teaching?	T1_57
Agueda Gras Velazquez	Inspire - challenging the lack of interest in Physics among students	T1_58
Elisa Rubino	Sloodle : Simulated Linked Object Orienteddynamic Learning management	T1_69
Grzegorz Karwasz	Discovering electromagnetic induction: interactive multimedia path	T1_78

September, 24th 2009 – 2.30 p.m. - 4.30 p.m. Room M, Rizzi Campus – Session 5

Track 3a **Active learning strategies with MM for education and teacher training: interactive learning, inquiry methods, problem solving, real time measurements and modeling to overcome conceptual knots in physics learning**

Presenter	*Title*	*Contribution code*
Irina Litovko	Computer based tools for development research and physics problem solving abilities of students	T3_9
Marco Gilibertia	An online course for secondary school teachers	T3_33
Pasquale Onorato	Damping of the oscillations and equilibrium of spring-mass systems due to different frictional forces	T3_40
Davide Mascoli	New technologies for understanding optics: Travelling on the crest of a wave?	T3_43
Petr Novak	The Educational Roles of Video Programs with Experiments	T3_45
Enzo Zecchi	Integrating technology into teaching: Lepida Scuola Project.	T3_51

September, 24th 2009 – 2.30 p.m. - 4.30 p.m. Room MM, Rizzi Campus – Session 5

Track 6 **Web-environments, Internet portals, Internet on-line services for physics teaching and learning**

Presenter	*Title*	*Contribution code*
Loredana Sabaz	Multimedia students' presentation of everyday phenomena in the secondary school	T6_2
Lucia Amoros Poveda	Interactivity in a remote laboratory	T6_37
Assunta Bonanno	Energy conversion and rotational mechanic measurements with a common dc motor	T6_49
Libor Konicek	Camera discovering world by pupils	T6_84
Tomasz Greczylo	High-Tech Kit - The Set of Advanced Activities From The Mosem Project	T6_96

September, 24th 2009 – 2.30 p.m. - 4.30 p.m. Room MM, Rizzi Campus – Session 5

Track 7 **MM materials and tools for evaluation of learning outcomes**

Presenter	*Title*	*Contribution code*
Bresges André Bresges	Test and Assessment to support cooperative learning of physics with Moodle-Style Web Applications	T7_17

September, 25th 2009 – 9.00 a.m. - 11.00 a.m. Room MM, Rizzi Campus – Session 7

Track 2 **Design and use electronic material: textbooks, learning-objects, Java applets, MM tools and Physlets**

Presenter	*Title*	*Contribution code*
Bruce Sherwood	21st century physics for in-service high school physics teachers	T2_3
Rajka Jurdana-Sepic	Courseware The History of Physics	T2_30
Peppino Sapia	Magnetic interactions: A multimedia interactive tutorial	T2_41
Raimund Girwidz	Illustration and Animation in Multimedia - Finding Possibilities and Critical Factors for Explaining Planck's Law and Infrared Radiation	T2_53
Hisham Alhadlaq	Challenges of making on-line physics course materials accessible worldwide	T2_72
Fu-kwun Hwang	NTNU Virtual Physics Laboratory: Java Simulations in Physics	T2_73

September, 25th 2009 – 9.00 a.m. - 11.00 a.m. Room M, Rizzi Campus – Session 7

Track 4 **MM for learning the basic concepts of science in primary and secondary school and teacher education modeling to overcome conceptual knots in physics learning**

Presenter	*Title*	*Contribution code*
Hermann Haertel	The Problem with so-called Fictitious Forces	T4_24
Ivan Kolarov	Multimedia on Physics for Traffic Safety Education	T4_66
Federico Corni	The MLE-Energy software for energy chain modeling	T4_82
Marina Castells	A Dialogical and Convincing Approach for the Teaching of Galilean Relativity of Motion: from transparencies to video and multimedia resources	T4_86
Alberto Stefanel	Thermal sensors interfaced with computer as extension of sense in primary school	T4_91
Michele Goffredo	Teaching Physics in a CLIL/Blended Learning Environment at Primary School	T4_94

September, 25th 2009 – 9.00 a.m. - 11.00 a.m. Room H, Rizzi Campus – Session 7

Track 3b **Active learning strategies with MM for education and teacher training: interactive learning, inquiry methods, problem solving, real time measurements and modeling to overcome conceptual knots in physics learning**

Presenter	*Title*	*Contribution code*
Peter Tàsnadi	Atmospheric Physics as a tool for making physics more interesting for students	T3_81
Claudio Fazio	An introduction to the Boltzmann factor by using Information Technology tools	T3_85
Mauro Cancian	Popularization of science culture in virtual words	T3_108

Presenter	*Title*	*Contribution code*
Giovanni Tarantino	The interactive physics flightsimulator	T3_110
Giorgio Pastore	Doing physics with a computer in High Scools: desingning and implementing numerical experiment	T3_111
Péter Nagy	Fortune wheel as a tool for illustration the basic principles of statistical Physics	T3_79

INTERACTIVE POSTER PRESENTATIONS

September, 24th 2009 – 4.45 p.m. - 5.45 p.m. Room 13, Rizzi Campus – Session 6a

Presenter	*Title*	*Contribution code*
Tibor Szakmány	CCD in your pocket	T1_31
Madelen Bodin	Creative interactive environment for doing physics	T1_62
Rene Matzdorf	Exploration of physical models by computer simulations in the first year of undergraduate studies	T1_67
Grzegorz Gagaia	Java Programming Language in Advanced Physics Education	T1_76
Eloneid Nobre	The Multimedia Technology in Production of Didactic Material for Distance Physics Courses in Brazil	T2_10
Sasa Divjak	Rich Internet Applications in Education	T2_11
Nyemchenko Uliana	Creation of electronic textbook in teaching about gas laws and pressure (hands-on kit)	T2_12
Ernesto Martín	CoLoS ideas applied to the study of a vacuum tube diode	T2_23
Carmen - Gabriela Bostan	To use the computer - a better way to understand physics	T3_25
Katalin Kopasz	Virtual measurement technology in Physics Education	T3_56
Ioannis Karras	Multimedia Application for the Conservation of Energy in a Working Environment through the Use of a Renewable Energy Sources (RES) Hybrid System	T3_70
Sebastian Gröber	Diffraction and interference as a remotely controlled laboratory (RCL) – real demonstration of experiment	T6_4

September, 24th 2009 – 5 45 p.m. - 6.45 p.m. Room 13, Rizzi Campus – Session 6b

Presenter	*Title*	*Contribution code*
Pavlo Antonov	Problem education. Modelling the atmospherical changes with the soap bubbles	T4_5
Tomaz Kranjc	How does a moon's trajectory look like?	T4_15
Barbara Rovsek	Simple Human Motions; Recorded Simultaneously with Video Camera and Tensiometric Plate	T4_16
Alessandro Senato	Tomo3D - Interactive simulations in a realistic 3D environment	T4_27
Ewa Kedzierska	Data Logging in Dutch Primary Schools	T4_54
Laurence Rogers	Science Experiments for Parents and Younf Children - Making Data-logging Fun	T4_121
Constantin Dan Buioca	Physics Lab on Line - A Case Study	T6_8
Miroslava Olvoldová	Real Interactive Free Fall Experiment with Data Collection and Transfer across Internet	T6_75
Mario Gervasio	A USB probe for resistivity versus temperature and Hall coefficient	T6_100

SPECIAL INTERACTIVE POSTER PRESENTATION

September, 24th 2009 – 4.45 p.m. - 6.45 p.m. Room 23, Rizzi Campus – Session 6

Presenter	*Title*	*Contribution code*
Stefano Oss	Flying with the right physics at hand	T3_119

POSTER PRESENTATIONS

September, 24th 2009 – 4.45 p.m. - 5.45 p.m. C1 Area, Rizzi Campus – Session 6

Presenter	*Title*	*Contribution code*
Dimitrios Zevgolis	Multimedia Application for Teaching the Basics of Lighting in Physics Classes	T1_1
Nadezhda Nancheva	M-Learning of the Superconductivity	T1_14
Arcadi Pejuan	Semi-virtual note-taking	T1_29
Muhammad Hanif	Computer Based Teaching and Leaning of Physics at Undergraduate Level by using multimedia	T1_39
Darya Kazachkova	Entertaining physics lessons as motivating agents for cognitive interest increasing	T1_48
Stefano Vercellati	Animate the formal tools to reconcile the local observation to the study of motion in physics	T1_52
Alberto Stefanel	Physics in context: Video analysis of judo situations to learn physics	T1_89
Francesco Casella	Analysis and development of self-regulated learning factors in e-learning systems	T1_95
Svetlana Sambueva	Electronic manual "Mechanics" for independent students' work of engineering	T2_64
Jiri Hrbacek	Use of Adobe Flash for the control of systems connected to the PC	T3_18
Lucia Amoros Poveda	Student Guide: a proposal	T3_36
Martin Kucera	The basic way of measuring system cooperating with the PC using the integrated Flash animation into educational mainstays	T3_47
Péter Nagy	Projectile solutions on Minkowski diagram	T3_80
Marián Kires	Development of student experimental skills exploring physical phenomena	T3_87
Alberto Stefanel	Modeling in a physics education laboratory for prospective teacher	T3_88
Marisa Michelini	Web discussion on quantum mechanics knots in teacher formation	T3_90
Zuzana Ješková	Interdisciplinary approach to physics teaching enhanced by computer-aided measurement	T3_92
Lorenzo Santi	A contribute to MOSEM2 project: Computer on-line e modeling integration on electromagnetic induction	T3_98
Tomasz Greczylo	Measuring and analyzing the resistivity break down of high temperature	T3_105
Dejan Krizaj	Holistic approach to teaching electrical engineering? – personal view	T3_112
Azita Seiedfadaei	Using Ppt.and LG. to create Optics concepts for Highschool students	T4_55
Gerd Kortemeyer	Gender Differences in the Use of an Online Homework System in an Introductory Physics Course	T5_0
Mario Ramirez	The on-line doctorate in physics education: An experience in a new form of physics teachers training	T5_32
Alessandra Mossenta	An environment to share in-service training on the net: an action-research about charge in primary and middle school	T5_61
Stefano Vercellati	A discussion of disciplinary knots on electromagnetism and superconductivity on a web environment in the context of an EU project for research-based in service teacher training	T5_122
Rossana Viola	Blended modality in implementing an European Project on curricular innovation for research-based in service teacher training on superconductivity	T5_123

Presenter	*Title*	*Contribution code*
Abrar Zafar	Development of Simulations for Laboratory Experiments	T6_6
Giacomo Bozzo	An on-line experiment on electromagnetic induction	T6_50
Alessandra Mossenta	Conservation of charge to understand potential using on line charge measurements	T6_60
Shylyn Tsydypov	The use of information technologies while studying laws of rectilinear motion	T6_63
Svetlana Sambueva	Study of the Crystal Structure of YBa2Cu3O6	T6_65
Franz Schauer	Real Interactive Pendulum Experiment with Data Collection and Transfer across Internet	T6_74
Jerzy Jarosz	Application of camera and laser beam in studying the flow dynamics of air and liquids	T6_77
Jodl Hans	Remotely Controlled Laboratories (RCL) at Kaiserslautern	T6_101
Mario Gervasio	LUCEGRAFO. A simple USB data acquisition system for diffraction experiments	T6_124
Lucia Amoros Poveda	Multimedia in Physics: an evaluation tool	T7_38
Petr Novak	Video-study of the Role of Experiments in Physics Education	T7_46