

# Report: 10<sup>th</sup> workshop on MPTL<sup>1</sup>

<sup>1</sup> Multimedia in Physics Teaching and Learning

This workshop was organized at the FU Berlin from 5-7 Oct. 2005 by Dr. J. Kirstein and Prof. Dr. V. Nordmeier in cooperation with the authors (programme, internet communication). It belongs to a series of workshops (for details [1]), and it was attended by about 60 participants representing about 25 countries. In addition, members of the CoLoS group (Conceptual Learning of Science [2]) joined our meeting. The scientific program offered 9 invited talks (see below), 20 interactive posters (traditional posters in combination with PC and internet connection) and 10 oral presentations.

- **Richard Bacon** (Guildford, Surrey, UK): Use of Multimedia in Physics Teaching in the United Kingdom
- **Ruth Chabay** (Raleigh, NC, USA): VPython: 3D simulation and visualization in the introductory university physics course
- **Vitor Duarte-Teodoro** (Lisbon, PT): Mathematical Modelling with Modellus: linking mathematics and physics
- **Bodo Eckert** (Kaiserslautern, DE): New Initiative: Status Report "Use of Multimedia in Europe"
- **Ton Ellermeijer** (Amsterdam, NL): Ten Years of MPTL-Workshops (Past and Future)
- **Hans-Jürgen Korsch** (Kaiserslautern, DE): Use of Multimedia in a Lecture about Nonlinear Dynamics
- **Leopold Mathelitsch** (Graz, AT): Report and Recommendations on Available

Multimedia Material for Teaching Heat, Thermodynamics and Statistical Mechanics

- **Dieter Schumacher** (Düsseldorf, DE): E-Learning Tools in Student Labs
- **Frank Schweickert** (Amsterdam, NL): Introduction to MMPhys Wiki (Database for Status Report)

#### Further Conference highlights were:

- Interactive poster sessions (25% of the full-time)
- Status report about the use of multimedia in physics teaching and learning in Great Britain
- A planned report about MM projects and activities in Europe (MMPhys in website [1])
- Evaluation of multimedia material about Heat, Thermodynamics, Statistical Mechanics. Former reports about equivalent evaluations concerning Mechanics (Graz 2004), Optics (Prague 2003) and Quantum Mechanics (Parma 2002) can be found in the websites of the respective workshops [1]
- Lecturing with multimedia (introductory physics, nonlinear dynamics and quantum mechanics)
- E-learning tools in students labs

The message in all contributions to this workshop was to point out the importance of the use of MM in the teaching and learning of physics; to stress the fact that about several thousand multimedia products do exist worldwide but only very few (< %) are excellent; up to now, emphasis has been laid more on the physical and technical aspects of the material,

less on the didactical implementation and evaluation; finally, due to modern communication techniques, interested groups worldwide are simultaneously working together now – not as in the past where we observed a time span of about 5-10 years in pedagogical initiatives between USA and Europe.

The e-proceedings from the 10<sup>th</sup> workshop in Berlin were available from the end of 2005 ([3]) as well as the e-proceedings of former workshops (Graz, MPTL9 – Prague, MPTL8 – Parma, MPTL7 etc.). Additional information about this series of workshops can be obtained from the web address [1] or by contacting jodl@physik.uni-kl.de, chairman of these workshops.

In 2006 the 11<sup>th</sup> workshop will be held at the end of September in Szeged, Hungary (contact: M. Benedict – Benedict@physx.uszeged.hu). It is planned for 2007 to combine the 12<sup>th</sup> workshop with a summer-school for graduate students in Greece. ■

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#### References

- [1] [http://pen.physik.uni-kl.de/w\\_jodl/mmeuro.htm](http://pen.physik.uni-kl.de/w_jodl/mmeuro.htm)
- [2] <http://www.colos.org>
- [3] [http://pen.physik.uni-kl.de/w\\_jodl/MPTL/MPTL10](http://pen.physik.uni-kl.de/w_jodl/MPTL/MPTL10)

## 2006 accelerator prizes awarded by the EPS-AG<sup>1</sup>

<sup>1</sup> European Physical Society Accelerator Group

Two of the three EPS-AG prizes were decided at the meeting of the 2006 Prize Selection Committee chaired by Dr. Norbert Angert of GSI on 22 February 2006. These prizes are:

a) An Achievement Prize for outstanding work in the accelerator field with no age limit. The winner will receive an engraved medal and make an oral presentation during the Accelerator Prizes Special Session during EPAC'06.

b) A Prize for an individual in the early part of his or her career, having made a recent significant, original contribution to the accelerator field. The winner will receive a framed certificate, and a cash prize of 2000 Euros, and will also make an oral presentation during the Accelerator Prizes Special Session during EPAC'06.

**Prize a)** is awarded to **Vladimir Teplyakov** (IHEP, Protvino) "For the invention of Radio Frequency Quadrupole (RFQ) accelerator structure, in collaboration with I.M. Kapchinsky. RFQ revolutionized the technique for accelerating low energy ion beams."

**Prize b)** is awarded to **Lutz Lilje** (DESY, Hamburg) "In recognition of his major role in the development and testing of high gradient superconducting RF structures, including his original contributions in the development of fast tuning systems."

The third prize, for a student registered for a PhD or diploma in accelerator physics or engineering, or to a trainee accelerator physicist or engineer in the educational phase of their professional career, for the quality of work and promise for the future, will be decided at the beginning of the conference.

The prizes will be awarded and the award winners will make oral presentations of their work during the 10<sup>th</sup> European Particle Accelerator Conference, EPAC'06, on Thursday 29 June 2006 at the Edinburgh International Conference Centre (EICC), Edinburgh, Scotland. ■

#### Useful Links:

**EPS-AG Home Page:**

<http://epac.web.cern.ch/EPAC/EPS-AG/>

**Past Winners EPS-IGA Prizes:**

[http://epac.web.cern.ch/EPAC/EPS-AG/Accelerator\\_Prizes/EPS-AG\\_Prize\\_Winners.htm](http://epac.web.cern.ch/EPAC/EPS-AG/Accelerator_Prizes/EPS-AG_Prize_Winners.htm)

**EPAC'06 Conference Home Page:**

<http://www.epac06.org>

**JACoW:**

<http://www.jacow.org>