

EPSRC Adventure Fund Project
IOP Quantum Electronics and Photonics Group
EPSRC NanoPhotonics Portfolio Centre

One day international research workshop on
Super-Toroidal Electrodynamics

5 November 2004

Technical session starts at 10:00 and will finish at approximately 18:00

Workshop venue:

*Seminar Room, level 5, building 46, School of Physics and Astronomy
University of Southampton, Highfield, Southampton, SO17 1BJ*

The aim of the workshop is to initiate an interdisciplinary discussion in the exciting emerging field of Super-Toroidal Electrodynamics. The workshop will involve leading international experts currently active in the field. Invited presentations will be followed by a discussion of "What could be the crucial experiments in the field of super-toroidal electrodynamics?"

The invited talks at the workshop will be:

1. *"Electromagnetic toroidal sources and their applications"* by Georgii Afanasiev, Joint Institute for Nuclear Research, Dubna, Russia
2. *"Topological Invariants in Molecular networks, and their current-like observables"* by Aurnout Ceulemans, Catholic University of Leuven, Belgium
3. *"Toroidal moments and atomic emission in condensed media"* by Eugene Tkalya, Nuclear Research Institute, Moscow state University, Russia
4. *"Toroidal moments in spin-ordered crystals"* by Hans Schmid, University of Geneva
5. *"Toroidal electrodynamics and solid state physics"* by Mikhail Martsenyuk, Perm State University, Russia
6. *"From the detection of the magnetic component of optical near-fields to nano-torus plasmons carrying a magnetic dipole moment at optical frequencies"* by Alain Dereux, University of Bourgogne, France.

Participation in the Workshop is free and open to all members of the academic community, but please note that pre-registration is essential as number of participants is strictly limited. Participants will be registered for the Workshop on a first come first served basis.

For registration please send an electronic mail to Mrs Christine Searle (cs3@soton.ac.uk) with the subject "TOROIDAL WORKSHOP REGISTRATION". The body of the message should contain your name, position, academic affiliation and address, contact telephone number and electronic mail address. All registered candidates will be acknowledged. Registered participants will receive detailed Workshop programme and directions to the venue.

Registered participants wishing to display a poster at the Workshop with their results in a relevant field should contact Professor N.Zheludev (n.i.zheludev@soton.ac.uk) as soon as practical.

Professor N.I.Zheludev and Professor A.Boardman

Workshop organizers