

NTR_2009 Program

Sunday, September 27

Transfer from airport Bastia	12-00
	17-00

Welcome Party	18-00
Dinner	19-00

In the week:

Breakfast	8-00
Lunch	12-00
Dinner	19-00

Monday, September 28

Morning session

9-00 - 9-15 V.Safarov Welcome.

9-15 – 10-00 I.Efimov (US)
Quantitative molecular physiology of the human heart

10-00 - 10-30 S.Chasovskikh (US)
Nanoimaging of interactions between supercoil-dependent gene regulatory proteins and DNA

10-30 – 10-45 Break

10-45 – 11-30 A.Kabashin (France)
Development of nanoplasmonics-based methods for biosensing

11-30 – 12-00 A.Chipuline (Germany)
Interaction of plasmonic resonators with QD and bio molecules – plans and possible collaborations

Afternoon session

16-00 – 16-45 S. Popov (UK) -
Nonlinear optics, wavelength and time format extension of fibre lasers in the IR, visible and UV

16-45 – 17-30 A. Apolonskiy (Germany)
The attosecond world: how to reach it with light and electron pulses (preliminary)

17-30 – 17-45 Break

17-45 – 18-15 M.Dyakonov (France)
Spin Hall Effect

18-15 – 18-45 V.Safarov (France)
Photovolataics for solar energy conversion

Tuesday, September 29

Morning session

9-00 – 9-30 E. Kuzin (Mexico)
Pulsed Fiber Lasers with a Nonlinear Sagnac Mirror

9-30 – 10-00 S. Sergeev (Ireland)
Migration Assisted Upconversion Processes in High Concentration Erbium Doped Fibre Amplifiers and Lasers

10-00 – 10-30 A.Nevsky (Germany)
Yb optical clock - development of an ultra-stable clock-laser

10-30 – 10-45 Break

10-45 – 11-30 Yuri Shestopaloff (Canada)
Physics of growth and replication of cells and other living organisms; generalization and a mathematical representation of some natural laws

11-00 – 11-30 G. Sukhorukov (UK)
Is it Enough Space in Microcapsules? Pack your Stuff in.

Afternoon session

16-00 – 16-45 B.Chichkov (Germany)
Laser-based nanoengineering for biomedical applications

16-45 – 17-15 S.Mikhailov (Switzerland)
Surface functionalisation and biocompatibility

17-15 – 17-30 Break

17-30 – 18-00 I.Morozov (RosSotrudnichestvo, RF)
Развитие инновационного пространства государств - участников СНГ

18-00 – 19-15 **Meeting of RASAssociation**

Wednesday, September 30.

Morning session

8-30 – 9-00 Y.Shestopaloff (Canada)

What did our civilization really inherit from the past?

9-00 – 9-30 A. Apolonskiy (Germany)

A bright future with a few-cycle gravity-wave detector: deep into the past

Site seeing Excursion

20-00 – **Conference Dinner**

Thursday, October 1.

Morning session

9-00 – 9-45 K.Arutyunov, (Finland)
Fundamental size limitations in quantum nanoelectronics: dead end or future development?

9-45– 10-15 Petrashov (UK)
Quantum Transport in Hybrid Metallic Nanostructures

10-15 – 10-45 A.Zaikin (Germany)
Parity Effect in Nanoscale Superconductors

10-45 – 11-00 Break

11-00 – 11-45 S.Kobtsev (RF)
Advanced solid-state, fibre and hybrid lasers for nanotechnologies

11-45 - 12-30 V.Yankov (USA)
Digital planar holography as integrating technology of nano-optics.

Afternoon session

16-00 – 16-30 S.Kalyuzhnyi (RusNanoCorporation, RF)
Rusnano: passing through nanotechnology jungles

16-30 – 17-00 L.Gozman (RusNanoCorporation, RF)
Presentation of selected RusNano projects.

17-00 – 17-20 S.Ivanets (Ministry of Education, RF)
Perspectives and problems of RASA - MES cooperation.

17-10 – 17-35 Brake

17-35 - 19-00 **Discussion:** interactions with scientific Russia;
A.Chipouline (Germany)
Overview of interaction with Russian research groups: FizTech and Moscow State University
V.Safarov (France)
Experience on project evaluation in the framework of Ministry Program “Kadry”

Friday, October 2.

Morning session

9-00 – 9-45 S. Sergeyev (Ireland)
Polarization Properties of Low PMD Fibre Raman Amplifiers (45 min)

9-45 - 10-15 S. Turitsyn (UK)
Rayleigh fibre lasers

10-15 - 10-45 A.Fotiadi (Belgium)
All-fiber techniques for coherent beam combining N

10-45 – 11-00 Break

11-00 – 11-30 L.Kuzmin (Sweden)
Nanotechnology Revolution in Space: Superconducting Nano-Bolometers for High-Performance Cosmology Instruments

11-30 – 12-00 N. Dyakonova (France)
Generation and detection of THz radiation by nanometric Field Effect Transistor

Afternoon session

16-00 – 16-30 S. Krivoshlykov (USA)
Fluorescence Fiber-Optic Sensors of Heavy Metal Ions and Volatile Organic Compounds

16-30 – 17-00 M. Doubenskaia (France)
Optical diagnostics in laser machining

17-00 – 17-30 A.Chipouline (Germany)
Multipole approach in optical metamaterials