CINSaT SPRING COLLOQUIUM 2018

Thursday, February 22th 2018

Opening of the Event

10:00 **J. P. Reithmaier (Head of CINSaT, Technische Physik)**
Opening speech

Session I (10:10 – 11:05)
Photonics **Chair**: T. Kusserow

10:10 **T. Kusserow (Nanophotonics)**
Current status of CINSaT main topic "Photonics"

10:25 **T. Winkler (Femtosecond Spectroscopy and Ultrafast Laser Control)**
Laser amplification in excited dielectrics

10:45 **N. Hoinka (Macromolecular Chemistry and Molecular Materials)**
Lasing in Paper

11:05 Break (15 minutes)

Session II (11:20 – 12:35)
Nanoscience in Art, Engineering and Natural Sciences **Chair**: T. Niendorf

11:20 **T. Niendorf (Institute of Material Technology)**
Current status of CINSaT main topic "Nanoscience in Art, Engineering and Natural Sciences"

11:30 **P. Krooß and T. Niendorf (Institute of Material Technology)**
Tutorial: shape-memory alloys

12:15 **B. Bauerhenne (Solids and Ultrafastphysics)**
Tailored potentials to describe laser-excited solids and nanostructures

12:35 Lunch (1h 20 minutes)

Session III (13:55 – 14:40)

Presentation of applicants for CINSaT membership **Chair**: J. P. Reithmaier

13:55 **A. Senftleben (Femtosecond Spectroscopy and Ultrafast Laser Control)**
Ultrafast dynamics in complex system

Session IV (14:40 – 15:40)

SP Meeting **Chair**: Main Topic Speakers

14:40 **Individual Main Topic Sessions**
The main topic sessions simultaneously take place in different rooms

15:40 Break (10 minutes)

Hiking Tour with all participants (15:50 – 17:30)

17:45 Dinner (1 h 15 minutes)

Poster Session (open end)

19:00 **All Contributors**
Presentation of Poster Contributions and Discussions

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07:00 Breakfast and Check-Out (2 h)

09:00 Group Photo (15 Minutes)

Session V (09:15 – 10:40)
Three-dimensional Nanostructures **Chair**: H. Hillmer

09:15 **H. Hillmer (Technological Electronics)**
Current status of CINSaT main topic "Three-dimensional Nanostructures"

09:30 **B. Mohr (Macromolecular Chemistry and Molecular Materials)**
Phosphoregulation in biomineralization

09:50 **K. Krekic (Chemical Hybrid Materials)**
Rare earth metal organic light emitting coordination polymers

10:10 **A. Tomita and U.-M. Ha (Functional Thin Films and Physics with Synchrotron Radiation, Technological Electronics)**
Magnetic Nanoimprint Particles

10:40 Break (15 minutes)

Session VI (10:55 – 11:50)
Chiral Systems **Chair**: P. Demekhin

10:55 **P. Demekhin (Theoretical Atomic and Molecular Physics)**
Current status of CINSaT main topic "Chiral Systems"

11:10 **A. Kastner (Femtosecond Spectroscopy and Ultrafast Laser Control)**
Intermediate state dependence of the photoelectron circular dichroism of fenchone observed via femtosecond resonance-enhanced multi-photon ionization

11:30 **A. D. Müller (Theoretical Atomic and Molecular Physics)**
Multiphoton PECD of bicyclic ketones by intense short laser pulses

11:50 Break (10 minutes)

Session VII (12:00 – 14:30)
Quantum Technology **Chair**: K. Singer

12:00 **K. Singer (Light-Matter-Interaction)**
Current status and overview of CINSaT main topic "Quantum Technology"

12:30 Lunch (1h 20 minutes)

13:50 **A. Kors (Technische Physik)**
Telecom wavelength single quantum dots

14:10 **A. Schmidt (Technische Physik)**
Fabrication of nanocrystalline diamond nanopillars and AFM tips

14:30 Break (15 minutes)

Session VIII (14:45 – 15:40)
Biosensing **Chair**: F. W. Herberg

14:45 **F. W. Herberg (Biochemistry)**
Current status of CINSaT main topic "Biosensing"

15:00 **M. Knape (Biochemistry)**
Conformational changes of biomolecules

15:20 **H. Hoang (Functional Thin Films and Physics with Synchrotron Radiation)**
Magnetophoretic Lab-on-a-Chip platform for biosensing applications

End of the Event

15:40 **J. P. Reithmaier (Head of CINSaT, Technische Physik)**
End speech