

**PLENARY SESSIONS SFM/TOMTI/CHRW**

<https://osachapter.zoom.us/j/98300886300>

**SARATOV TIME UTC+4**

**SESSION I**

**SEPTEMBER 29, TUESDAY, 14-00-14-40 (BERLIN 12-00-12-40)**



**MECHANISMS OF RECOVERY FUNCTIONS OF SLEEP: THE ROLE OF THE MENINGEAL LYMPHATIC SYSTEM**

**Thomas Penzel**

Interdisciplinary Center of Sleep Medicine in Charité – Universitätsmedizin Berlin, Germany

**SEPTEMBER 29, TUESDAY, 14-40-15-20 (BERLIN 12-40-13-20)**



**NONLINEAR ANALYSIS OF ELECTRICAL ACTIVITY OF SLEEP BRAIN: PHOTOSTIMULATION OF THE MENINGEAL LYMPHATIC SYSTEM**

**Juergen Kurths**

Physics Department, Humboldt University, Berlin, Germany  
Potsdam Institute for Climate Impact Research, Potsdam, Germany

**SEPTEMBER 29, TUESDAY, 15-20-16-00 (SAMARA 15-20-16-00)**



**MULTIMODAL OPTICAL DIAGNOSTICS OF CANCER**

**Valery P. Zakharov**

Samara National Research University, Samara, Russia

**SEPTEMBER 29, TUESDAY, 16-00-16-40 (BARCELONA 14-00-14-40)**



**ADAPTING TO A PANDEMIC & AN INTERNATIONAL CLINICAL TRIAL WITH DIFFUSE OPTICS**

**Marco Pagliazzi, Lorenzo Cortese, Umut Karadeniz**, ICFO; **Jaume Mesquida**, Hospital de Sabadell, Institut Universitari Parc Taulí; **Turgut Durduran**, ICFO-The Institute of Photonic Sciences, Barcelona, Spain, Institució Catalana de Recerca i Estudis Avançats (ICREA), Spain on behalf of the HEMOCOVID-19 consortium

**SEPTEMBER 29, TUESDAY, 16-40-17-20 (JENA 14-40-15-20)**



**CLINICAL BIOPHOTONICS - FROM BENCH TO BEDSIDE**  
**Juergen Popp**  
Leibniz Institute of Photonic Technology, Jena, Germany

**SEPTEMBER 29, TUESDAY, 17-20-17-30 COFFE BREAK FOR OWN**

**SESSION II**

**SEPTEMBER 29, TUESDAY, 17-30-18-00 (WORCESTER 9-30-10-00)**



**MAGNETIC RESONANCE IMAGING AND OPTICAL CLEARING**  
**Alexei A. Bogdanov Jr.**

University of Massachusetts Medical School, Worcester MA, USA

A.N. Bakh Institute of Biochemistry, Federal Research Center "Fundamentals of Biotechnology" of the Russian Academy of Sciences and Moscow State University, Moscow, Russia

**SEPTEMBER 29, TUESDAY, 18-00-18-20 (SHOHAM 17-00-17-20)**



**ASPECT IMAGING COMPACT PRECLINICAL PERMANENT MAGNETS: TECHNOLOGY AND APPLICATIONS**  
**Kobi Katsobashvili**

Aspect Imaging LTD., Shoham, Israel

**SEPTEMBER 29, TUESDAY, 18-20-19-00 (BOSTON 10-20-11-00)**



**MODELING OF SPECKLE CONTRAST AND DYNAMICS IN THE SINGLE AND FEW SCATTERING REGION**

**David Boas**  
Boston University, Boston, USA

**SEPTEMBER 29, TUESDAY, 19-00-19-15 (BERLIN 17-00-17-15)**



**FLIM AND FCS MICROSCOPY IN BIOPHYSICS AND BIOCHEMISTRY PICOQUANT**  
**Mathias Bayer**  
PicoQuant GmbH, Berlin, Germany

**SEPTEMBER 29, TUESDAY, 19-15-19-55 (MONTREAL 11-15-11-55)**



**UBIQUITOUS TERAHERTZ PHOTONICS**  
**Maksim Skorobogatiy**  
Department of Engineering Physics, Polytechnique Montreal, Canada

**SEPTEMBER 29, TUESDAY, 19-55-20-35 (GALVESTON 10-55-11-35)**



**OPTOACOUSTICS: EMERGING IMAGING AND THERANOSTIC MODALITY**  
**Rinat O. Esenaliev**  
University of Texas Medical Branch, Galveston, Texas, USA

**SESSION III**

**SEPTEMBER 30, WEDNESDAY, 9-00-9-40, TUCSON (SEPTEMBER 29, TUESDAY, 22-00-22-40)**



**DEVELOPMENT OF SUB-MILLIMETER MULTIFUNCTION OPTICAL ENDOSCOPES**  
**Jennifer Barton**  
University of Arizona, Tucson, Arizona, USA

**SEPTEMBER 30, WEDNESDAY, 9-40-10-20 (TOKYO 14-40-15-20)**



**WHOLE-BODY/ORGAN IMAGING WITH SINGLE-CELL RESOLUTION BY CUBIC**

**Hiroki R. Ueda**  
The University of Tokyo/RIKEN BDR, Tokyo, Japan

**SEPTEMBER 30, WEDNESDAY, 10-20-11-00 (MOSCOW 9-20-10-00)**



**DESIGN OF TUNABLE COLLOIDAL INTERACTIONS IN EXTERNAL ROTATING ELECTRIC AND MAGNETIC FIELDS**

**Stanislav O. Yurchenko**  
Bauman Moscow State Technical University, Moscow, Russia

**SEPTEMBER 30, WEDNESDAY, 11-00-11-40 (SARATOV 11-00-11-40)**



**NUCLEIC ACID & AU NANOPARTICLES-BASED ADVANCED FUNCTIONAL BIOMATERIALS**

**Timofey E. Pylaev**

Institute of Biochemistry and Physiology of Plants and Microorganisms, Russian Academy of Sciences, Saratov, Russia

**SEPTEMBER 30, WEDNESDAY, 11-40-12-00 COFFE BREAK FOR OWN**

**SESSION IV**

**SEPTEMBER 30, WEDNESDAY, 12-00-12-40 (MOSCOW 11-00-11-40)**



**QUANTUM COMPUTING WITH HIGH-DIMENSIONAL SYSTEMS**

**Alexei K. Fedorov**  
Russian Quantum Center, Skolkovo, Russia  
Moscow Institute of Physics and Technology, Russia

**SEPTEMBER 30, WEDNESDAY, 12-40-13-20 (MOSCOW 11-40-12-20)**



**DECELLULARIZED MATERIALS IN REGENERATIVE MEDICINE THROUGH THE PRISM OF BIOPHOTONICS**

**Peter S. Timashev**  
Institute for Regenerative Medicine, Sechenov University, Russia  
Department of Polymers and Composites, N.N. Semenov Institute of Chemical Physics of RAS, Russia  
Institute of Photonic Technologies, Research Center "Crystallography and Photonics" of RAS, Russia

**SEPTEMBER 30, WEDNESDAY, 13-20-13-50 (BERLIN 11-20-11-50)**



**FIBER PHOTONICS FOR LIFE: NEWS & DREAMS**

**Viacheslav Artyushenko**

art photonics GmbH, Berlin, Germany

**SESSION V**

**TOMTI'20 \_Plenar SESSION 5, <https://us02web.zoom.us/j/88598605813?pwd=903032>**

**OCTOBER 1, THURSDAY, 15-00-15-25 (MOSCOW 14-00-14-25)**



**VISUALIZATION OF HISTONE EPIGENETICS: A NEW WAY TO TRACK SINGLE-CELL PHYSIOLOGY**

**Konstantin A. Lukyanov**

Center of Life Sciences, Skolkovo Institute of Science and Technology, Moscow, Russia

**OCTOBER 1, THURSDAY, 15-25-15-40 (AMSTERDAM 13.25-13.40)**



**SUPER-RESOLUTION WITH VERY LOW LASER POWER, IDEAL FOR LONG TERM IMAGING**

**Peter Drent**

Confocal.nl, Amsterdam, The Netherlands

**OCTOBER 1, THURSDAY, 15-40-16-20 (HOUSTON 6-40-7-20)**



**LIVE BIOPHOTONIC ANALYSIS OF EARLY MAMMALIAN EMBRYONIC PROCESSES**

**Irina V. Larina**

Baylor College of Medicine, Houston, USA

**OCTOBER 1, THURSDAY, 16-20-17-00 (MICHIGAN 8-20-9-00)**



**IMAGE-GUIDED PRECISION NANOMEDICINE FOR CANCER THERAPY**

**Dr. Anna Moore**

Departments of Radiology and Physiology,  
Precision Health Program College of Human Medicine  
Michigan State University, East Lansing, USA

**OCTOBER 1, THURSDAY, 17-00-17-40 (BOSTON) 9-00-9-40**



**MOLECULAR IMAGING USING FLUORESCENCE LIFETIME**

**Dr. Anand T.N. Kumar**

Harvard Medical School  
Optical Molecular Imaging Laboratory  
Athinoula A. Martinos Center for Biomedical Imaging  
Massachusetts General Hospital, Boston, USA

**OCTOBER 1, THURSDAY, 17-40-18-00 (ARES – 15-40-16-00)**



**PRECLINICAL & MULTIMODALITY IMAGING MR SOLUTIONS**

**Fabrice Chaumard,  
MR Solutions Ltd, Ares, France**