

Program

Mathematical models and methods in electromagnetics for particles simulations, characterization and synthesis

Wednesday, 16 December

Chairman: **Prof. Yu. Eremin**

- 16:00 "Introduction: CMC Department of Moscow State University".
Prof. A. Razgulin, Lomonosov Moscow State University, CMC Faculty, Russia.
- 16:30 "History of the Bremen Moscow collaboration on light scattering".
Dr. T. Wriedt, University of Bremen, Germany
- 17:00 "Mapping evanescent wave scattering from colloidal ellipsoids".
Prof. C. Wirth, Case Western Reserve University, USA.
- 17:30 Coffee-break

Chairman: **Dr. T. Wriedt**

- 17:45 "Static laser diffraction - reconstruction of red blood cells size and shape distributions".
Dr. V. Ustinov, **Dr. E. Cybrov**, **Prof. S. Nikitin**, Lomonosov Moscow State University, CMC Faculty, Faculty of Physics, Russia
- 18:15 "Image simulator for the total internal reflection microscopy".
Dr. A. Vasilyeva, **Dr. D. Efremenko**, **Prof. A. Doicu**, German Aerospace Center (DLR), Germany
- 18:35 "Hybrid scheme of the discrete sources method to solve nonlocal scattering problems in plasmonic applications".
Dr. I. Lopushenko, University of Oulu, Finland

. Thursday, 17 December

Chairman: **Dr. V. Lopushenko**

- 16:00 "Discrete dipole approximation for electromagnetic scattering simulations".
Dr. M. Yurkin, Voevodsky Institute of Chemical Kinetics and Combustion, Russian Academy of Sciences, Russia.
- 16:30 "Characterization of single particles from light-scattering profiles using parametric shape models".
Dr. M. Yurkin, Voevodsky Institute of Chemical Kinetics and Combustion, Russian Academy of Sciences, Russia
- 16:50 "Influence of the non-local dispersion on the near field of core-shell particles deposited on a plane substrate".
Prof. Yu. Eremin, Lomonosov Moscow State University, CMC Faculty, Russia.
- 17:15 Coffee-break

Chairman: **Dr. V. Ustinov**

- 17:30 "Numerical method for determining the inhomogeneity boundary in the two-dimensional electrical impedance tomography problem in the case of piecewise constant conductivity".
Dr. S. Gavrilov, Lomonosov Moscow State University, CMC Faculty, Moscow, Russia
- 17:50 "Correlation tensor of the magnetic field in dynamo theory".
Dr. E. Mikhailov, **student S. Elistratov**, **Dr. D. Grachev**, Lomonosov Moscow State University, Faculty of Physics, Russia.
- 18:10 "Optimal image processing on a continuous plane via convolution: balancing processing quality and efficiency".
Prof. P. Golubtsov, Lomonosov Moscow State University, Faculty of Physics, Russia.