9th Internatiional Conference
on Electromagnetic and Light Scattering by Non-spherical Particles:
5-9 June 2006, St. Petersburg University, St. Petersburg, Russia
http://www.astro.spbu.ru/ELS9

ACCEPTED ABSTRACTS

INVITED

1. Jaroslav Holoubek, Some Applications of Light Scattering in Materials Science
2. J. H. Hough, New frontiers for astronomical polarimetry
3. J. W. Hovenier and M. Min, Bell-shaped Polarization Phase Curves
4. Nikolai Khlebtsov, Vladimir Bogatyrev, Lev Dykman, Anna Alekseeva, Boris Khlebtsov, and Andrei Melnikov, Optical properties and biomedical applications of metal nanorods
5. Alexander Kokhanovsky, Satellite remote sensing of atmospheric aerosol and clouds
6. Endrik Krügel, Monte Carlo radiative transfer including PAHs
7. Alex Lazarian, Grain Alignment, Polarization and Magnetic Fields

ORAL

1. Anatoli G. Borovoi and Natalia V. Kustova, Statistical model of phase functions for large randomly oriented ice crystal particles
2. Karine Chamaillard Physical interpretation of statistical approach of the Stokes parameter for nonspherical particles
3. Dmitrii B. Demin, Alexander G. Kyurkchan, and Nina I. Orlova, Solution of scattering problems of electromagnetic waves from objects coated with dielectric materials by Pattern Equation Method
4. J. Dlugach and M. I. Mishchenko, Diffuse and coherent backscattering of polarized light: polarization ratios for a discrete random half-space composed of spheroids
5. Elena Eremina, Norbert Riefler, Thomas Wriedt and Laurent Helden, Evanescent wave scattering modeling for total internal reflection microscopy
6. J. D. Eversole, H-B. Lin, C. S. Scotto, M. Hart and J. R. Meyer, Optical characterization of biological particles
7. M. Francoeur, P. G. Venkata, M. M. Aslan, and M. P. Mengüç, Preliminary sensitivity analaysis for characterization of gold nano-particles via surface wave scattering
8. Yevgen Grynko and Yuriy Shkuratov, Scattering by clusters of large transparent particles with different shapes

9. D. Guirado, J. W. Hovenier and F. Moreno, Circular polarization of light scattered by asymmetrical particles

10. Edith Hadamcik, Jean-Baptiste Renard, Anny-Chantal Levasseur-Regourd, Light scattering by huge low density agglomerates with the PROGRA^2 experiment

11. E. A. Hawes, J. T. Hastings, C. Crofcheck, and M. P. Mengüç, Near Field absorption and scattering by surface plasmon resonance of agglomerated gold particles

12. Jens Hellmers and Thomas Wriedt, Nullfield Method with Discrete Sources: Influence of the deposition of Discrete Sources on numerical stability

13. V. B. Il'in and V. G. Farafonov, Separation of variables in the light scsattering theory

14. Nikolai Kiselev and Vera Rosenbush, Observational evidences for aligned non-spherical particles in cometary atmospheres

15. Ludmilla Kolokolova, Alexander Lazarian, and Vera Rosenbush, Asymmetries in dust particles as a source of circular polarization in comets

16. J. Krelowski, Distribution of dust in the interstellar medium

17. Pavel Litvinov, Victor Tishkovets, and Klaus Ziegler, Coherent backscattering effects from random media of complex particles

18. Vincent L. Y. Loke, Timo A. Nieminen, Agata M. Brańczyk, Norman R. Heckenberg, and Halina Rubinsztein-Dunlop, Modelling optical micro-machines

19. Andrei E. Lugovtsov, Alexander V. Priezzhev, and Sergei Yu. Nikitin, Light scattering by arbitrarily oriented optically soft spheroidal particles: calculation in geometric optics approximation

20. Michiel Min and Joop Hovenier, Absorption and emission by inhomogeneous aggregates of irregularly shaped constituents

21. M. I. Mishchenko, Accuracy of the scalar approximation in radiative transfer computations for wavelength-sized and larger particles

22. F. Moreno, F. González, and José M. Saiz, Spectral shift in metal particle resonances induced by near field interaction with dielectric surfaces

23. Fernando Moreno, Olga Muñoz, Antonio Molina, Rosario Vilaplana, and Daniel Guirado, Can a distribution of compact particles reproduce the observed properties of cometary dust at visible wavelengths?

24. Karri Muinonen, Evgenij Zubko, Yurij G. Shkuratov, and Gorden Videen, Discrete-dipole light-scattering simulations for Gaussian particles with power-law covariance

25. Hannu Parviainen and Karri Muinonen, Ray-Tracing Light-Scattering Model for Random Rough Surfaces

26. Antti Penttilä, Asteroid taxonomy and polarization

27. D. Petrov, Yu. Shkuratov, Gorden Videen, An optimization of the T-matrix method for size and refractive-index averaging of independently scattering particles

28. V. Psarev, A. Ovcharenko, Yu. Shkuratov, I. Belskaya, G. Videen, Photopolarimetry of surfaces with complicated structure at extremely small phase angles

29. Y. Shkuratov, N. Opanasenko, E. Zubko, C. Pieters, G. Videen, A. Opanasenko, Polarimetry of the lunar surface at large phase angles

30. Viktor P. Tishkovets and Klaus Jockers, Light scattering by densely packed random media. Dense media vector radiative transfer equation

31. D. B. Vaidya and R. Gupta, Interstellar extinction and polarization by composite dust

32. Hester Volten, Olga Muñoz, Joop Hovenier, Frans Rietmeijer, Joe Nuth and Rens Waters, Experimental light scattering by fluffy aggregates

33. Nikolai V. Voshchinnikov, Victor G. Farafonov, and Gorden Videen, Development of the separation of variables method for multi-layered spheroids

34. Thomas Wriedt, Review of the Null-Field Method with Discrete Sources

35. M. A. Yurkin and A. G. Hoekstra, An Extrapolation Technique to Increase the Accuracy of The Discrete Dipole Approximation

36. M. A. Yurkin, V. P. Maltsev, and A. G. Hoekstra, Can the Discrete Dipole Approximation Simulate Scattering of Particles with Size Parameter equal to 100?

37. Evgenij Zubko, Yuriy Shkuratov, Gorden Videen, Karri Muinonen, Effects of interference on the backscattering properties of irregularly shaped particles using DDA

Posters

1. P. Albella, F. Moreno, J. M. Saiz, and F. González, Far-field analysis of surfaces containing nano-contaminants on microstructures

2. Vladimir V. Berdnik, Victor A. Babenko, and Valery A. Loiko, Light scattering by ensemble of correlated two-layered particles

3. Sergey Bondarenko, Yuriy Shkuratov, Gorden Videen, Hester Volten, and Olga Muñoz, Photopolarimetry of particulate surfaces and particle in air at large phase angles

4. Aleksey V. Burnashov, Anatoli G. Borovoi, and Andrew Y.S. Cheng, Light scattering by preferably oriented ice crystal particles

5. E. D. Eydelman and S. V. Konyakhin, Light absorption and viscosity of stable suspension of single ultrananocrystaline made by milling

6. Frédéric Gruy and Sandra Jacquier, Approximation of the scattering cross section for aggregated spherical particles

7. V. B. Il'in and V. G. Farafonov, Electromagnetic field expansions in terms of spheroidal functions
8. V. B. Il'in and M. S. Prokopjeveva Polarization of starlight by inhomogeneous dust grains
9. Vladimir V. Karjukin, Problem of the simulation of multiple light scattering by non-spherical particles
10. Sen Kikuchi, The gas to dust ratios in cometary comae deduced from multichannel polarimetry
11. Moshe Kleiman, Ioseph Gurwich, and Nir Shiloah, Enhanced extinction of electromagnetic radiation by metal coated fibers
12. A. N. Korolevich, E. K. Naumenko, N. S. Dubin, S. I. Vecherinski, A. Bernjak, M. Belsley, and A. Stefanovska, Backreflectance from the blood plexus in the skin under the low-power laser heating
13. Natalia V. Kustova, Anatoli G. Borovoi, and Maxim N. Gavrilov, Small-angle scattering by ice crystals
14. Alexander G. Kyurkchan and Nadejda I. Smirnova, Solution of wave diffraction problems on impedance scatterers by method of continued boundary conditions
15. Jérémie Lasue, Anny-Chantal Levasseur-Regourd, Jean-Baptiste Renard, and Edith Hadamcik, Scattering by coated spheres: experimental results and numerical simulations
16. Valery A. Loiko, Gennady I. Ruban, Olga A. Gritsai, Svetlana M. Kosmacheva, and Natalia V. Goncharova, Elaboration of optical model of lymphocytes as applied to scanning flow cytometry
17. S. Malynych and G. Chumanov, Extinction spectra of quasi-spherical silver sub-micron particles
18. A. C. Marra, A. Blanco, A. Dinoi, S. Fonti, G. A. Marzo, V. Orofino, and R. Politi, Extinction spectra of particulate materials: the role of tiny dust covering larger grains
19. O. Merchiers, F. Moreno, F. González, and G. Videen, Influence of the optical constants ε and μ on the scattering patterns of two interacting dipoles
20. Eugene F. Mikhailov, Sergey S. Vlasenko, and Michael Yu. Igonin, Structural and optical properties of hydrophobic and hydrophilic soot aggregates in water saturated air
21. Karri Muinonen, Inversion of small-particle silhouettes for Gaussian-sphere parameters
22. Timo Nousiainen and Karri Muinonen, Discrete dipole light scattering simulations for harmonic Gaussian particles
23. Leonid E. Paramonov and Vladimir A. Schmidt, Estimation of the orientation structure of axially symmetric particles from backscattering data

24. Antti Penttilä, Evgenij Zubko, Kari Lumme, Karri Muinonen, Maxim Yurkin, Yurij Shkuratov, and Alfons Hoekstra, Comparison between discrete dipole and exact techniques

25. Vera Rosenbush, Michael Mishchenko, and Nikolai Kiselev, Evidences for coherent backscattering in high-albedo atmosphereless Solar System bodies

26. Sergey N. Savenkov, Konstantin E. Yushtin, Ranjan S. Muttiah, and Sergey N. Volchkov, Polarization memory in passing the polarized light through inhomogeneous birefringent media

27. D. Semenov, H. Klahr, C. Dullemond, and Th. Henning, Opacities for hydrosimulations

28. D. G. Stankevich, L. G. Istomina, Yu. G. Shkuratov, and G. Videen, Monte-Carlo modeling of the coherent backscattering effect in a random medium consisting of large non-transparent spheres

29. Jani Tyynelä and Karri Muinonen, Inverse methods for retrieving surface topography from visual images