FINAL PROGRAM

ELSEVIER

ITMO UNIVERSITY

department of PHYSICS

Moscow | EET (GMT +3)	Monday, July 12th	TIME ZONES		
		CDT	GMT	China | Singapore (GMT +8)
12:50 - 13:00	Opening ceremony	4:50 - 5:00	09:50 - 10:00	17:50 - 18:00
13:00 - 14:40	Session 1: Electromagnetic Scattering Theory and Applications I *Session chair: Mathieu Francoeur*	5:00 - 6:40	10:00 - 11:40	18:00 - 19:40
14:40 - 15:00	BREAK	6:40 - 7:00	11:40 - 12:00	19:40 - 20:00
15:00 - 16:40	Session 2: Athmospheric Radiation and Remote Sensing I *Session chair: Lei Bi*	7:00 - 8:40	12:00 - 13:40	20:00 - 21:40
16:40 - 17:00	BREAK	8:40 - 9:00	13:40 - 14:00	21:40 - 22:00
17:00 - 18:42	Pitch session 1: Athmospheric Radiation and Remote Sensing & Electromagnetic Scattering Theory and Applications & Numerical Methods *Session chair: Alexey Shcherbakov*	9:00 - 10:36	14:00 - 15:36	22:00 - 23:36

	Tuesday, July 13th	TIME ZONES		
Moscow | EET (GMT +3)		CDT	GMT	China | Singapore (GMT +8)
13:00 - 14:40	**Session 3: Electromagnetic Scattering Theory and Applications II** ***Session chair: Maxim Yurkin***	5:00 - 6:40	10:00 - 11:40	18:00 - 19:40
14:40 - 15:00	BREAK	6:40 - 7:00	11:40 - 12:00	19:40 - 20:00
15:00 - 16:40	**Session 4: Laboratory and Field Experiments I** ***Session chair: Matthew J. Berg***	7:00 - 8:40	12:00 - 13:40	20:00 - 21:40
16:40 - 17:00	BREAK	8:40 - 9:00	13:40 - 14:00	21:40 - 22:00
17:00 - 18:45	**Session 5: Numerical Methods** ***Session chair: Pinar Mengüç***	9:00 - 10:45	14:00 - 15:45	22:00 - 23:45
18:45 - 19:00	BREAK	10:45 - 11:00	15:45 - 16:00	23:45 - 00:00
19:00 - 20:48	**Pitch session 2: Numerical Methods & Electromagnetic Scattering Theory and Applications & Laboratory and Field Experiments** ***Session chair: Alexey Shcherbakov***	11:00 - 12:48	16:00 - 17:48	00:00 - 01:48

	Wednesday, July 14th	TIME ZONES		
Moscow | EET (GMT +3)		CDT	GMT	China | Singapore (GMT +8)
13:00 - 14:35	**Session 6: Electromagnetic Scattering Theory and Applications III** ***Session chair: Mathieu Francoeur***	5:00 - 6:35	10:00 - 11:35	18:00 - 19:35
14:35 - 14:50	BREAK	6:35 - 7:50	11:35 - 11:50	19:35 - 19:50
14:50 - 16:30	**Session 7: Electromagnetic Scattering Theory and Applications IV** ***Session chair: Maxim Yurkin***	7:50 - 8:30	11:50 - 13:30	19:50 - 21:30
16:30 - 16:50	BREAK	8:30 - 8:50	13:30 - 13:50	21:30 - 21:50
16:50 - 18:20	**Session 8: Michael Mischenko's Scientific Legacy** ***Session chair: Pinar Mengüç***	8:50 - 10:20	13:50 - 15:20	21:50 - 23:20
18:20 - 18:40	**Announcement of Award Winners** ***Session chairs: Pinar Mengüç, Ping Yang, Gorden Videen***	10:20 - 10:40	15:20 - 15:40	23:20 - 23:40
18:40 - 19:00	BREAK	10:40 - 11:00	15:40 - 16:00	23:40 - 00:00
19:00 - 20:25	**Session 9: Athmospheric Radiation and Remote Sensing II** ***Session chair: Ping Yang***	11:00 - 12:25	16:00 - 17:25	00:00 - 01:25

Moscow | EET (GMT +3)	Thursday, July 15th	TIME ZONES		
		CDT	GMT	China | Singapore (GMT +8)
13:00 - 14:48	**Pitch session 3: Numerical Methods & Electromagnetic Scattering Theory and Applications & Astrophysical Applications** ***Session chair: Alexey Shcherbakov***	5:00 - 6:48	10:00 - 11:48	18:00 - 19:48
14:48 - 15:10	BREAK	6:48 - 7:10	11:48 - 12:10	19:48 - 20:10
15:10 - 16:35	**Session 10:Astrophysical Applications I** ***Session chair: Ludmilla Kolokolova***	7:10 - 8:35	12:10 - 13:35	20:10 - 21:35
16:35 - 16:50	BREAK	8:35 - 8:50	13:35 - 13:50	21:35 - 21:50
16:50 - 17:50	**Session 11: Astrophysical Applications II** ***Session chair: Gorden Videen***	8:50 - 9:50	13:50 - 14:50	21:50 - 22:50
17:50 - 18:00	BREAK	9:50 - 10:00	14:50 - 15:00	22:50 - 23:00
18:00 - 19:40	**Session 12: Electromagnetic Scattering Theory and Applications V** ***Session chair: Maxim Yurkin***	10:00 - 11:40	15:00 - 16:40	23:00 - 00:40

Moscow | EET (GMT +3)	Friday, July 16th	TIME ZONES		
		CDT	GMT	China | Singapore (GMT +8)
14:00 - 15:45	**Session 13: Laboratory and Field Experiments II** ***Session chair: Olga Munoz***	6:00 - 7:45	11:00 - 12:45	19:00 - 20:45
15:45 - 16:00	BREAK	7:45 - 8:00	12:45 - 13:00	20:45 - 21:00
16:00 - 17:30	**Session 14: Electromagnetic Scattering Theory and Applications VI** ***Session chair: Anne Virkki***	8:00 - 9:30	13:00 - 14:30	21:00 - 22:30
17:30 - 17:50	BREAK	9:30 - 9:50	14:30 - 14:50	22:30 - 22:50
17:50 - 19:15	**Session 15: Athmospheric Radiation and Remote Sensing III** ***Session chair: Oleg Dubovik***	9:50 - 11:15	14:50 - 16:15	22:50 - 00:15
19:15 - 19:50	BREAK	11:15 - 11:50	16:15 - 16:50	00:15 - 00:50
19:50 - 21:20	**Session 16: Athmospheric Radiation and Remote Sensing IV** ***Session chair:***	11:50 - 13:20	16:50 - 18:20	00:50 - 02:20
21:20 - 21:30	**Closing ceremony**	13:20 - 13:30	18:20 - 18:30	02:20 - 02:30

Monday, July 12

Opening session

	title	duration (min)
A. Shcherbakov M. Berg A. Virkki L. Bi M. Francoeur M. Yurkin	ELS XIX introduction	10

	session start time	session end time
Moscow	12.07.2021 12:50:00	12.07.2021 13:00:00
CDT	12.07.2021 4:50:00	12.07.2021 5:00:00
Beijing	12.07.2021 17:50:00	12.07.2021 18:00:00
GMT	12.07.2021 9:50:00	12.07.2021 10:00:00

Session 01

Electromagnetic Scattering Theory and Applications I

Session chair: Mathieu Francoeur

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	13:00 - 13:25	**K. Muinonen (invited)**	Scattering and absorption in discrete random media of densely-packed particles	25	3	12.07.2021 13:00:00
2	13:25 - 13:40	A. Fazel-Najafabadi	Shining from all sides: orientation-averaged optical properties of nanoparticle assemblies	15	12	12.07.2021 22:25:00
3	13:40 - 13:55	G. Kristensson	The coherent electromagnetic field and the effect of the pair distribution function	15	2	12.07.2021 12:40:00
4	13:55 - 14:10	A. Penttila	How much is enough? The convergence of finite sample scattering properties to those of infinite media	15	3	12.07.2021 13:55:00
5	14:10 - 14:25	V. Loiko	Optical response of polymer dispersed liquid crystal films doped with single- and multi-walled carbon nanotubes	15	3	12.07.2021 14:10:00
6	14:25 - 14:40	Y. Grynko	Light backscattering from large clusters of densely packed irregular particles	15	2	12.07.2021 13:25:00

	session start time	session end time
Moscow	12.07.2021 13:00:00	12.07.2021 14:40:00
CDT	12.07.2021 5:00:00	12.07.2021 6:40:00
Beijing	12.07.2021 18:00:00	12.07.2021 19:40:00
GMT	12.07.2021 10:00:00	12.07.2021 11:40:00

Session 02

Athmospheric Radiation and Remote Sensing I

Session chair: Lei Bi

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	15:00 - 15:25	**A. Ansmann (invited)**	Recent progress in polarization lidar applications to aerosols and clouds	25	2	12.07.2021 14:00:00
2	15:25 - 15:40	E. Zubko	Active remote sensing of atmospheric dust through expansion of the Umov law	15	9	12.07.2021 21:25:00
3	15:40 - 15:55	B. Yi	Cloud scattering property parameterizations and their applications in remote sensing and GCM	15	8	12.07.2021 20:40:00
4	15:55 - 16:10	J. Chowdhary	Polarimetric remote sensing of the atmosphere in the UV-VIS spectrum: Modeling scattering and absorption by Brown Carbon	15	-4	12.07.2021 8:55:00
5	16:10 - 16:25	M. Haarig	Depolarization and lidar ratio observations in Saharan dust at 355, 532, and 1064 nm	15	2	12.07.2021 15:10:00
6	16:25 - 16:40	A. Marshak	Effect of scattering angle on Earth reflectance	15	-4	12.07.2021 9:25:00

	session start time	session end time
Moscow	12.07.2021 15:00:00	12.07.2021 16:40:00
CDT	12.07.2021 7:00:00	12.07.2021 8:40:00
Beijing	12.07.2021 20:00:00	12.07.2021 21:40:00
GMT	12.07.2021 12:00:00	12.07.2021 13:40:00

Pitch session 1

Athmospheric Radiation and Remote Sensing & Electromagnetic Scattering Theory and Applications & Numerical Methods

Session chair: Alexey Shcherbakov

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	17:00 - 17:06	F. Kanngiesser	Optical properties of water-coated sea salt aerosol	6	2	12.07.2021 16:00:00
2	17:06 - 17:12	M. Herreras-Giralda	Emission source function calculation in non-isothermal atmospheres	6	2	12.07.2021 16:06:00
3	17:12 - 17:18	L. Paulien	Lidar multiple scattering by soot fractal aggregates	6	2	12.07.2021 16:12:00
4	17:18 - 17:24	J. Wei	Assessing surface albedo biases over the ocean in the Community Earth System Model (CESM)	6	-5	12.07.2021 9:18:00
			discussion	3		
5	17:27 - 17:33	D. Li	Impacts of pixel down-sampling on GOES-16 ABI ice cloud retrievals	6	-5	12.07.2021 9:27:00
6	17:33 - 17:39	V. Loiko	Light scattering, polarization, and absorption by monolayer of spherical particles with short- and imperfect long-range spatial order	6	3	12.07.2021 17:33:00
7	17:39 - 17:45	S. Alhaddad	Negative polarization at backscattering from clusters of absorbing irregular particles: numerical simulations	6	2	12.07.2021 16:39:00
			discussion	3		
8	17:48 - 17:54	L. Yang	Inverse Design of Metasurface Based on Neural Network	6	8	12.07.2021 22:48:00
9	17:54 - 18:00	A. Kichigin	Simulating nanoparticles interaction with an electron beam using the discrete dipole approximation	6	7	12.07.2021 21:54:00
10	18:00 - 18:06	S. Zhang	Scattering of Non-paraxial Airy beam by the dielectric Ellipsoid particle based on T-matrix	6	8	12.07.2021 23:00:00
11	18:06 - 18:12	H. Alkhoori	Electromagnetic scattering by a three-dimensional object composed of an orthorhombic dielectric-magnetic medium with magnetoelectric gyrotropy	6	4	12.07.2021 19:06:00
			discussion	3		
13	18:15 - 18:21	A. Saidi	On the Simulation of the Absorbance of Ag-Au Alloyed Nanoparticles	6	2	12.07.2021 17:15:00
14	18:21 - 18:27	Y. Zhang	Vector Spherical Harmonics Expansion Truncation in the Invariant Imbedding T-matrix Method	6	-5	12.07.2021 10:21:00
15	18:27 - 18:33	J. Coy	Improved Ice Particle Backscattering Computations from a Newly Developed Single-Scattering Database	6	-5	12.07.2021 10:27:00
			discussion	3		

	session start time	session end time
Moscow	12.07.2021 17:00:00	12.07.2021 18:36:00
CDT	12.07.2021 9:00:00	12.07.2021 10:36:00
Beijing	12.07.2021 22:00:00	12.07.2021 23:36:00
GMT	12.07.2021 14:00:00	12.07.2021 15:36:00

Tuesday, July 13

Session 03

Electromagnetic Scattering Theory and Applications II

Session chair:

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	13:00 - 13:25	**E. le Ru (invited)**	The Rayleigh hypothesis: from single particle to multiple scattering	25	12	13.07.2021 22:00:00
2	13:25 - 13:40	A. Romanov	Characterization of a single sphere using amplitude and phase Fourier spectrum of its light-scattering profile	15	7	13.07.2021 17:25:00
3	13:40 - 13:55	J. Gienger	On the Interference of Incident and Scattered Fields in Generalized Lorenz-Mie Theory	15	2	13.07.2021 12:40:00
4	13:55 - 14:10	S. Roy	Modelling of Corona virus using light scattering	15	5,5	13.07.2021 16:25:00
5	14:10 - 14:25	A. Kyurkchan	Solving the problem of wave diffraction on a body of revolution with a rough boundary	15	3	13.07.2021 14:10:00
6	14:25 - 14:40	V. Il'in	New practical approach to light scattering by spheroids with a use of the spheroidal basis	15	3	13.07.2021 14:25:00

	session start time	session end time
Moscow	13.07.2021 13:00:00	13.07.2021 14:40:00
CDT	13.07.2021 5:00:00	13.07.2021 6:40:00
Beijing	13.07.2021 18:00:00	13.07.2021 19:40:00
GMT	13.07.2021 10:00:00	13.07.2021 11:40:00

Session 04

Laboratory and Field Experiments I

Session chair: Matthew J. Berg

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	15:00 - 15:25	**M. Potenza (invited)**	Single Particle Extinction and Scattering: a new approach for multiparametric optical characterization of nano- and microparticles	25	2	13.07.2021 14:00:00
2	15:25 - 15:40	B. Fazio	Visualization of light beaming and interference effects in random arrays of silicon nanowires: the inelastic scattering case	15	2	13.07.2021 14:25:00
3	15:40 - 15:55	S. Savenkov	Depolarization and anisotropy parameters from Mueller polarimetry on three groups of barley leaves	15	3	13.07.2021 15:40:00
4	15:55 - 16:10	O. Munoz	Effect of particle size on the scattering pattern of a set of forsterite samples	15	2	13.07.2021 14:55:00
5	16:10 - 16:25	A. Miffre	A laboratory Pi-polarimeter to evaluate light scattering by complex-shaped particles at near and exact backscattering: mineral dust, soot aggregates, core-shell organic sulfates	15	2	13.07.2021 15:10:00
6	16:25 - 16:40	C. Li	Measurement of droplets with nanoparticles using two wavelength extinction rainbow refractometry	15	8	13.07.2021 21:25:00

	session start time	session end time
Moscow	13.07.2021 15:00:00	13.07.2021 16:40:00
CDT	13.07.2021 7:00:00	13.07.2021 8:40:00
Beijing	13.07.2021 20:00:00	13.07.2021 21:40:00
GMT	13.07.2021 12:00:00	13.07.2021 13:40:00

Session 05

Numerical Methods

Session chair: Pinar Mengüç

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	17:00 - 17:15	A. Kleanthous	Application of the Boundary Element Method to Complex Ice Aggregates to compute their Single-Scattering Properties at Microwave frequencies for all-sky data assimilation	15	1	13.07.2021 15:00:00
2	17:15 - 17:30	B. Ganapol	1D Neutron Transport in a 1D Half-Space by the Ln0 Method	15	-7	13.07.2021 7:15:00
3	17:30 - 17:45	L. Perez	FORMA and BEFORE: expanding applications of optical tweezers	15	2	13.07.2021 16:30:00
4	17:45 - 18:00	S. Hawkins	A numerically stable T-matrix algorithm	15	-6	13.07.2021 8:45:00
5	18:00 - 18:15	I. Fenni	CBFM on Adaptive Mesh for Efficient Calculation of Scattering by Complex-Shaped Mixed-Phase Hydrometeors	15	-7	13.07.2021 8:00:00
6	18:15 - 18:30	J. Freimanis	Direct testing of polarized radiative transfer Monte Carlo codes	15	3	13.07.2021 18:15:00
7	18:30 - 18:45	J. Ding	Development of Jacobian Computational Capability in Vector Radiative Transfer Model	15	-5	13.07.2021 10:30:00

	session start time	session end time
Moscow	13.07.2021 17:00:00	13.07.2021 18:45:00
CDT	13.07.2021 9:00:00	13.07.2021 10:45:00
Beijing	13.07.2021 22:00:00	13.07.2021 23:45:00
GMT	13.07.2021 14:00:00	13.07.2021 15:45:00

Pitch session 2

Numerical Methods & Electromagnetic Scattering Theory and Applications & Laboratory and Field Experiments

Session chair: Alexey Shcherbakov

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	19:00 - 19:06	H. Tang	Scattering of the shaped beam by a PEMC sphere	6	8	14.07.2021 0:00:00
2	19:06 - 19:12	A. Moskalensky	Open-Source Implementation of the DDA for light scattering in an Absorbing Medium	6	7	13.07.2021 23:06:00
3	19:12 - 19:18	Y. Jia (**declined**)	Twin photonic nanojets produced by a vector Bessel beam	6	8	14.07.2021 0:12:00
4	19:18 - 19:24	M. Li	The use of Debye's series and a ray-tracing technique to study near-backscattering polarization of coated particles	6	8	14.07.2021 0:18:00
			discussion	3		
5	19:27 - 19:33	S. Roy	Significance of refractive index in light scattering measurements with allusion to biological particles	6	5,5	13.07.2021 21:57:00
6	19:33 - 19:39	A. Gogoi	Nonlinear light scattering by particulate matter: a model based on RGD approximation	6	5,5	13.07.2021 22:03:00
7	19:39 - 19:45	S. Glukhova	Scattering simulation of generalized Bessel beams by arbitrary particles	6	7	13.07.2021 23:39:00
8	19:45 - 19:51	A. Kostyukov	Lattice Kerker effect in arrays of Al nanoparticles	6	7	13.07.2021 23:45:00
			discussion	3		
9	19:54 - 20:00	R. Giri	Multi-Spectral Digital Holography for Microparticle Characterization	6	-5	13.07.2021 11:54:00
10	20:00 - 20:06	E. Frattin	Experimental phase function and degree of linear polarization of olivine and spinel: the effect of size	6	2	13.07.2021 19:00:00
11	20:06 - 20:12	D. Cholleton	Laboratory evaluation of the scattering matrix of complexshaped ragweed pollen particles at near and exact backscattering	6	2	13.07.2021 19:06:00
12	20:12 - 20:18	A. Miffre	Polarization lidar: Investigating the dependence of Backscattering Ångström exponents with the particles size, shape and complex refractive index	6	2	13.07.2021 19:12:00
			discussion	3		
13	20:21 - 20:27	J. Gomez Martin	On the application of scattering matrix measurements to detection and identification of major types of airborne aerosol particles: volcanic ash, desert dust and pollen	6	2	13.07.2021 19:21:00
14	20:27 - 20:33	T. Wriedt	The ScattPort story	6	2	13.07.2021 19:27:00
15	20:33 - 20:39	D. Guirado	Granada-Amsterdam Light Scattering Database	6	2	13.07.2021 19:33:00
16	20:39 - 20:45	M. Saito	TAMUdust2020: A comprehensive database of the single-scattering properties of irregular dust aerosols	6	-5	13.07.2021 12:39:00
			discussion	3		

	session start time	session end time
Moscow	13.07.2021 19:00:00	13.07.2021 20:48:00
CDT	13.07.2021 11:00:00	13.07.2021 12:48:00
Beijing	14.07.2021 0:00:00	14.07.2021 1:48:00
GMT	13.07.2021 16:00:00	13.07.2021 17:48:00

Wednesday, July 14

Session 06

Electromagnetic Scattering Theory and Applications III

Session chair:

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	13:00 - 13:25	**L. Bi (invited)**	Electromagnetic wave scattering by superspheroids	25	8	14.07.2021 18:00:00
2	13:25 - 13:50	**M. Yurkin (invited)**	The discrete dipole approximation: from Maxwell's equations to practical applications	25	7	14.07.2021 17:25:00
3	13:50 - 14:05	D. Ciriza	Machine learning to enhance the calculation of optical forces in the geometrical optics approximation	15	2	14.07.2021 12:50:00
4	14:05 - 14:20	K. Inzhevatkin	Optimization of the discrete-dipole approximation for large optically soft particles	15	7	14.07.2021 18:05:00
5	14:20 - 14:35	I. Lenton	Observing charging events on optically trapped particles	15	3	14.07.2021 14:20:00

	session start time	session end time
Moscow	14.07.2021 13:00:00	14.07.2021 14:35:00
CDT	14.07.2021 5:00:00	14.07.2021 6:35:00
Beijing	14.07.2021 18:00:00	14.07.2021 19:35:00
GMT	14.07.2021 10:00:00	14.07.2021 11:35:00

Session 07

Electromagnetic Scattering Theory and Applications IV

Session chair: Maxim Yurkin

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	14:50 - 15:15	**J. García de Abajo (invited)**	Optical Excitations with Free Electrons: Challenges and Opportunities	25	2	14.07.2021 13:50:00
2	15:15 - 15:30	I. Rasskazov	Metal-enhanced fluorescence: Stronger than we thought	15	-4	14.07.2021 8:15:00
3	15:30 - 15:45	H. Li	A light scattering view of magnetic polariton in gratings	15	8	14.07.2021 20:30:00
4	15:45 - 16:00	A. Foti	Optically induced aggregation by radiation pressure of gold nanorods on graphene for SERS detection of biomolecules	15	2	14.07.2021 14:45:00
5	16:00 - 16:15	P. Polimeno	Dual-beam optical trapping and optical manipulation of gain-assisted plasmonic/dielectric nanoshells	15	2	14.07.2021 15:00:00
6	16:15 - 16:30	J. Ye	Gap-enhanced Raman tags imaging for information security	15	8	14.07.2021 21:15:00

	session start time	session end time
Moscow	14.07.2021 14:50:00	14.07.2021 16:30:00
CDT	14.07.2021 6:50:00	14.07.2021 8:30:00
Beijing	14.07.2021 19:50:00	14.07.2021 21:30:00
GMT	14.07.2021 11:50:00	14.07.2021 13:30:00

Session 08

Michael Mischenko's Scientific Legacy

Session chair: Pinar Mengüç

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	16:50 - 17:05	**P. Yang (invited)**	Dr. Michael I. Mishchenko's contributions to Electromagnetic Scattering, Radiative Transfer, and Remote Sensing	15	-5	14.07.2021 8:50:00
2	17:05 - 17:20	**M. Yurkin (invited)**	On the feasibility of measuring extinction of single particles	15	7	14.07.2021 21:05:00
3	17:20 - 17:35	**A. Doicu (invited)**	Electromagnetic scattering by discrete random media	15	2	14.07.2021 16:20:00
4	17:35 - 17:50	**O. Dubovik (invited)**	Accounting for particle non-sphericity in aerosol remote sensing	15	2	14.07.2021 16:35:00
5	17:50 - 18:05	**J. Dlugach (invited)**	Scattering and absorption properties of spheroidal soot-sulfate aerosols	15	3	14.07.2021 17:50:00
6	18:05 - 18:20	**P. Marston (invited)**	Scattering by small oblate spheroidal drops of water in the rainbow region: T-matrix results and geometric interpretation	15	-4	14.07.2021 11:05:00

	session start time	session end time
Moscow	14.07.2021 16:50:00	14.07.2021 18:20:00
CDT	14.07.2021 8:50:00	14.07.2021 10:20:00
Beijing	14.07.2021 21:50:00	14.07.2021 23:20:00
GMT	14.07.2021 13:50:00	14.07.2021 15:20:00

Awards

Announcement of Award Winners

Session chairs: Pinar Mengüç, Ping Yang, Gorden Videen

	duration (min)
2020 Elsevier's H. C. van de Hulst Award recepient: Professor G. Gouesbet	20
2020 Elsevier's M. Mishchenko Award recepient: Professor T. Wriedt	
2020 Elsevier/JQSRT P. Waterman Award	
2020 Elsevier/JQSRT Richard M. Goody Award	
2021 Elsevier/JQSRT P. Waterman Award	
2021 Elsevier/JQSRT Richard M. Goody Award	

	session start time	session end time
Moscow	14.07.2021 18:20:00	14.07.2021 18:40:00
CDT	14.07.2021 10:20:00	14.07.2021 10:40:00
Beijing	14.07.2021 23:20:00	14.07.2021 23:40:00
GMT	14.07.2021 15:20:00	14.07.2021 15:40:00

Session 09

Athmospheric Radiation and Remote Sensing II

Session chair: Ping Yang

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	19:00 - 19:25	**O. Dubovik (invited)**	Inverse problem of light scattering: applications in remote sensing	25	2	14.07.2021 18:00:00
2	19:25 - 19:40	E. Mathen	Analysis and Modelling of TTL ice crystals based on in-situ measurement of scattering patterns	15	1	14.07.2021 17:25:00
3	19:40 - 19:55	G. Wen	Water vapor variability near clouds from ground-based spectroradiometer observed zenith radiance	15	-4	14.07.2021 12:40:00
4	19:55 - 20:10	F. Xu	A Correlation-based Inversion Method for Aerosol Property Retrieval from AirMSPI and AERONET Measurements	15	-5	14.07.2021 11:55:00
5	20:10 - 20:25	S. Korkin	Numerical results for polarized light scattering in a spherical atmosphere	15	-5	14.07.2021 12:10:00

	session start time	session end time
Moscow	14.07.2021 19:00:00	14.07.2021 20:25:00
CDT	14.07.2021 11:00:00	14.07.2021 12:25:00
Beijing	15.07.2021 0:00:00	15.07.2021 1:25:00
GMT	14.07.2021 16:00:00	14.07.2021 17:25:00

Thursday, July 15

Pitch session 3

Numerical Methods & Electromagnetic Scattering Theory and Applications & Astrophysical Applications

Session chair: Alexey Shcherbakov

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	13:00 - 13:06	Q. Duan	Light Scattering by Large Raindrops: Simulation with the Vectorial Complex Ray Model	6	8	15.07.2021 18:00:00
2	13:06 - 13:12	M. Luo	Convection-type heat transfer behavior in the asymmetric nanoparticle chains via thermal photons	6	8	15.07.2021 18:06:00
3	13:12 - 13:18	B. Sun	Linearization of single scattering properties with respect to refractive indices, size parameters, and aspect ratios	6	8	15.07.2021 18:12:00
4	13:18 - 13:24	S. Zhang	Extinction of an infinite circular cylinder in absorbing media	6	8	15.07.2021 18:18:00
			discussion	3		
5	13:27 - 13:33	N. Song	Optical pulling force on a magneto-dielectric Mie sphere illuminated by a linearly-polarized Airy light-sheet	6	8	15.07.2021 18:27:00
6	13:33 - 13:39	E. Zhuzhulina	Aperture polarimetry of comets	6	3	15.07.2021 13:00:00
7	13:39 - 13:45	A. Voitko	Monitoring of Color in Comet 29P/Schwassmann-Wachmann 1	6	2	15.07.2021 12:00:00
8	13:45 - 13:51	M. Zheltobryukhov	Polarization of the near-Earth asteroid (52768) 1998 OR2	6	3	15.07.2021 13:00:00
			discussion	3		
9	13:54 - 14:00	E. Chornaya	Imaging polarimetry of Comet C/2020 S3 (Erasmus)	6	10	15.07.2021 20:00:00
10	14:00 - 14:06	K. Shmirko	Application of relationship between reflectivity and lidar depolarizaition ratio. AERONET data case.	6	10	15.07.2021 20:00:00
11	14:06 - 14:12	A. Kochergin	Negative Polarization in Comet 29P/Schwassmann–Wachmann	6	10	15.07.2021 20:00:00
12	14:12 - 14:18	O. Shubina	Polarization dependencies based on DBCP V2.0	6	3	15.07.2021 13:00:00
			discussion	3		15.07.2021 10:00:00
13	14:21 - 14:27	V. Rosenbush	A study of ultrahigh polarization of the active NEA asteroid (3200) Phaethon: observations and modeling	6	3	15.07.2021 13:00:00
14	14:27 - 14:33	J. Arnold	Retrieving dust properties of debris disks	6	-4	15.07.2021 6:00:00
15	14:33 - 14:39	J. Li	Investigating the impact of aerosol vertical distribution on aerosol radiative forcing and satellite AOD retrieval	6	8	15.07.2021 18:00:00
16	14:39 - 14:45	Y. Dong	Retrieval of aerosol single scattering albedo from a combination of satellite and surface visibility measurements	6	8	15.07.2021 18:00:00
			discussion	3		

	session start time	session end time
Moscow	15.07.2021 13:00:00	15.07.2021 14:48:00
CDT	15.07.2021 5:00:00	15.07.2021 6:48:00
Beijing	15.07.2021 18:00:00	15.07.2021 19:48:00
GMT	15.07.2021 10:00:00	15.07.2021 11:48:00

Session 10

Astrophysical Applications I

Session chair: Ludmilla Kolokolova

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	15:10 - 15:35	**E. Zubko (invited)**	Studying comets by means of polarimetry: Current status and further development.	25	9	15.07.2021 21:10:00
2	15:35 - 15:50	G. Videen	Blurring the cosmic microwave background with charged dust particles	15	2	15.07.2021 14:35:00
3	15:50 - 16:05	D. Petrov	Light scattering by fractal agglomerated debris particles model	15	3	15.07.2021 15:50:00
4	16:05 - 16:20	C. Emde	Spectropolarimetry of planet Earth	15	2	15.07.2021 15:05:00
5	16:20 - 16:35	P. Polimeno	Polarization constraints on core-mantle interstellar dust grains	15	2	15.07.2021 15:20:00

	session start time	session end time
Moscow	15.07.2021 15:10:00	15.07.2021 16:35:00
CDT	15.07.2021 7:10:00	15.07.2021 8:35:00
Beijing	15.07.2021 20:10:00	15.07.2021 21:35:00
GMT	15.07.2021 12:10:00	15.07.2021 13:35:00

Session 11

Astrophysical Applications II

Session chair: Gorden Videen

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	16:50 - 17:05	L. Kolokolova	Light scattering by packed media formed by Gaussian particles: modeling surfaces of icy satellites of Saturn	15	-4	15.07.2021 9:50:00
2	17:05 - 17:20	A. Virkki	Radar polarimetric analysis of bistatic Mini-RF observations of Mare Imbrium, Censorinus, and Aristarchus regions	15	2	15.07.2021 16:05:00
3	17:20 - 17:35	N. Kiselev	Recent progress in studying polarization of the Jupiter's satellite Europa	15	3	15.07.2021 17:20:00
4	17:35 - 17:50	H. Das	The Umov effect in dust aggregates: Dependence on porosity	15	5,5	15.07.2021 20:05:00

	session start time	session end time
Moscow	15.07.2021 16:50:00	15.07.2021 17:50:00
CDT	15.07.2021 8:50:00	15.07.2021 9:50:00
Beijing	15.07.2021 21:50:00	15.07.2021 22:50:00
GMT	15.07.2021 13:50:00	15.07.2021 14:50:00

Session 12

Electromagnetic Scattering Theory and Applications V

Session chair: Karri Muinonen

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	18:00 - 18:25	**N. Khlebtsov (invited)**	Surface-enhanced Raman scattering from gold nanorods as a function of their aspect ratio and morphology: a reexamination study	25	3	15.07.2021 18:00:00
2	18:25 - 18:40	V. Markel	An extinction paradox involving collimated beams and its resolution	15	-4	15.07.2021 11:25:00
3	18:40 - 18:55	P. Stegmann	Deep Learning for Fast Transmittance Parameterization	15	-4	15.07.2021 11:40:00
4	18:55 - 19:10	J. Fung	Brownian dynamics simulations of sphere clusters in complex optical beams	15	-4	15.07.2021 11:55:00
5	19:10 - 19:25	A. Nahmad-Rohen	A scattering-based effective-medium model for dense suspensions of large tenuous particles and its application to the diagnosis of diseases of the blood	15	-5	15.07.2021 11:10:00
6	19:25 - 19:40	M. Donato	Optical forces in front of epsilon-near-zero metamaterials	15	2	15.07.2021 18:25:00

	session start time	session end time
Moscow	15.07.2021 18:00:00	15.07.2021 19:40:00
CDT	15.07.2021 10:00:00	15.07.2021 11:40:00
Beijing	15.07.2021 23:00:00	16.07.2021 0:40:00
GMT	15.07.2021 15:00:00	15.07.2021 16:40:00

Friday, July 16

Session 13

Laboratory and Field Experiments II

Session chair: Olga Munoz

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	14:00 - 14:15	A. Magazzu	Optical trapping, manipulation, and characterization of cosmic dust particles	15	2	16.07.2021 13:00:00
2	14:15 - 14:30	L. Cremonesi	Measuring the contribution of structure to light extinction by aggregates	15	2	16.07.2021 13:15:00
3	14:30 - 14:45	V. Tobon	Laboratory microwave analog measurements and simulations of dust in planet-forming disks	15	2	16.07.2021 13:30:00
4	14:45 - 15:00	B. Delestre	On the tomography of irregular rough particles using interferometric particle imaging	15	2	16.07.2021 13:45:00
5	15:00 - 15:15	D. Marwick	Principal Component Analysis for the simultaneous characterisation of size and refractive index of dispersed particles in a fluid	15	1	16.07.2021 13:00:00
6	15:15 - 15:30	P. Gautam	Design of a multi-angle light scattering setup covering the whole scattering angle range (0.32° to 177.6°) and interpretation of light scattering data under Q-space analysis	15	-5	16.07.2021 7:15:00
7	15:30 - 15:45	J. Yan	Mapping Colloidal Ellipsoids with A Rotatable Stage via Scattering Morphology Resolved Total Internal Reflection Microscopy (SMR-TIRM)	15	-4	16.07.2021 8:30:00

	session start time	session end time
Moscow	16.07.2021 14:00:00	16.07.2021 15:45:00
CDT	16.07.2021 6:00:00	16.07.2021 7:45:00
Beijing	16.07.2021 19:00:00	16.07.2021 20:45:00
GMT	16.07.2021 11:00:00	16.07.2021 12:45:00

Session 14

Electromagnetic Scattering Theory and Applications VI

Session chair: Anne Virkki

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	16:00 - 16:15	E. Hesse	Physical optics beam tracer models for smooth and rough non-spherical particles	15	1	16.07.2021 14:00:00
2	16:15 - 16:30	C. Emde	IPRT polarized radiative transfer model intercomparison project - Three-dimensional test cases	15	2	16.07.2021 15:15:00
3	16:30 - 16:45	A. Konoshonkin	Light scattering by large nonspherical particles within the physical optics method	15	7	16.07.2021 20:30:00
4	16:45 - 17:00	N. Okeudo	Edge Effect Correction to the Physical Geometric Optics Method Using the Debye Series for Super-spheroid Non-spherical Particles	15	-5	16.07.2021 8:45:00
5	17:00 - 17:15	C. Zhang	Airy theory revisited with VCRM and physical optics	15	2	16.07.2021 16:00:00
6	17:15 - 17:30	L. Walter	Near-field radiative heat transfer between particles modeled by the discrete system Green's function method	15	-6	16.07.2021 8:15:00

	session start time	session end time
Moscow	16.07.2021 16:00:00	16.07.2021 17:30:00
CDT	16.07.2021 8:00:00	16.07.2021 9:30:00
Beijing	16.07.2021 21:00:00	16.07.2021 22:30:00
GMT	16.07.2021 13:00:00	16.07.2021 14:30:00

Session 15

Athmospheric Radiation and Remote Sensing III

Session chair: Oleg Dubovik

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	17:50 - 18:05	**P. Yang (invited)**	Professor Kuo-Nan Liou's contributions to Light Scattering, Radiative Transfer, and Remote Sensing	15	-4	16.07.2021 10:50:00
2	18:05 - 18:30	**Q. Zhang (invited)**	Light Scattering by Fire Smoke Aerosols in Visible Wavelength	25	8	16.07.2021 23:05:00
3	18:30 - 18:45	Z. Wang	Impacts of laser beam divergence on lidar multiple scattering polarization returns from water clouds	15	8	16.07.2021 23:30:00
4	18:45 - 19:00	J. Moilanen	Light scattering in airborne ice crystals	15	2	16.07.2021 17:45:00
5	19:00 - 19:15	B. van Diedenhoven	Retrieval of aerosol water fraction and dry size distribution using multi-angle polarimetry	15	2	16.07.2021 18:00:00

	session start time	session end time
Moscow	16.07.2021 17:50:00	16.07.2021 19:15:00
CDT	16.07.2021 9:50:00	16.07.2021 11:15:00
Beijing	16.07.2021 22:50:00	17.07.2021 0:15:00
GMT	16.07.2021 14:50:00	16.07.2021 16:15:00

Session 16

Athmospheric Radiation and Remote Sensing IV

Session chair: Anne Virkki

	Moscow time (GMT+3)	presenting author	title	duration (min)	GMT shift	local speaker time
1	19:50 - 20:05	M. Gao	Accelerating multi-angle polarimetric aerosol and ocean retrievals for NASA's PACE mission	15	-4	16.07.2021 12:50:00
2	20:05 - 20:20	A. Davis	How do cloud images form? 2 intertwined diffusion processes	15	-7	16.07.2021 10:05:00
3	20:20 - 20:35	P. Zhai	Radiative transfer for coupled atmosphere and ocean systems in ultraviolet: challenges and applications	15	-4	16.07.2021 13:20:00
4	20:35 - 20:50	E. Kassianov	Two Decades of Ground-based Multisensor AOD Measurements at US Continental Site: Acquisition and Merger	15	-6	16.07.2021 11:35:00
5	20:50 - 21:05	T. Ren	Performance of cloud 3D solvers in anvil-like ice cloud shortwave radiation closure at the top of the atmosphere over the equatorial western Pacific Ocean	15	-5	16.07.2021 12:50:00
6	21:05 - 21:20	Y. Wang	Assessing light absorbing aerosol optical properties and radiative forcing by combining laboratory results, satellite data, and numerical models	15	-7	16.07.2021 11:05:00

	session start time	session end time
Moscow	16.07.2021 19:50:00	16.07.2021 21:20:00
CDT	16.07.2021 11:50:00	16.07.2021 13:20:00
Beijing	17.07.2021 0:50:00	17.07.2021 2:20:00
GMT	16.07.2021 16:50:00	16.07.2021 18:20:00

Closing

title	duration (min)
Closing cermony	10

	session start time	session end time
Moscow	16.07.2021 21:20:00	16.07.2021 21:30:00
CDT	16.07.2021 13:20:00	16.07.2021 13:30:00
Beijing	17.07.2021 2:20:00	17.07.2021 2:30:00
GMT	16.07.2021 18:20:00	16.07.2021 18:30:00