

International conference «MDMR2026»

Preliminary program

Monday, 28 September

08:30–11:00 Registration

11:00–11:30 Opening ceremony

11:30–13:00 Plenary session. Chair: S. Khantimerov

11:30–12:15 S. V. Demishev: THE LANDAU-LIFSHITZ EQUATION, THE GILBERT EQUATION, AND THE DESCRIPTION OF EPR USING SEMICLASSICAL MAGNETIZATION DYNAMICS: BREAKING STEREOTYPES AND NEW EFFECTS

12:15–13:00 K. Salikhov. ON THE NARROWING EFFECT OF EPR SPECTRA DUE TO PARTICLE MOTION AND ITS POTENTIAL IMPLICATIONS FOR OTHER SCIENTIFIC DISCIPLINES

	Room1		Room2
14:30-16:00	Advances in Magnetic Resonance Theory and Instrumentation	14:30-16:00	Low-dimensional systems, nano-systems and molecular magnets
	M. Fedin (invited) APPLICATIONS OF EPR SPECTROSCOPY TO HETEROJUNCTION PHOTOCATALYSTS N.E.Polyakov (invited) NUCLEAR HYPERPOLARIZATION IN ELECTRON TRANSFER IN CHIRAL SYSTEMS S. Veber (oral) INFRARED SPECTROSCOPY with the ADVANTAGES of SYNCHROTRON RADIATION SOURCES: GLOBAL EXPERIENCE and PROSPECTS for the “IR-DIAGNOSTICS” BEAMLINE at the SKIF FACILITY		R.Babunts (invited) ODMR BASED MAPPING OF DIAMOND AND SILICON CARBIDE WITH NANOMETER RESOLUTION V. Zhaketov (oral) POLARIZED NEUTRON REFLECTOMETRY IN OSCILLATING MAGNETIC FIELDS: RESONANT PHENOMENA IN LOW-DIMENSIONAL MAGNETIC SYSTEMS E. Alakshin (oral) MAGNETIC PROPERTIES OF PrF₃ NANOPARTICLES A. Garaeva (oral) Study of the magnetic properties of micro and nanosized DyF₃
16:00-16:30	Coffee-break		
16:30-17:50	Advances in Magnetic Resonance Theory and Instrumentation	16:30-18:00	Low-dimensional systems, nano-systems and molecular magnets
	V.V. Belykh (invited) EMERGING ODMR TECHNIQUES FOR SPIN DYNAMICS IN SOLIDS		G. Eaton (invited) LOW-LYING ELECTRONIC ENERGY LEVELS CORRELATE WITH FASTER ELECTRON SPIN

	H. Yang_(invited) A QUANTITATIVE EPR METHOD BASED ON ELECTRON		LATTICE RELAXATION RATES FOR LANTHANIDE COMPLEXES IN DIVERSE COORDINATION ENVIRONMENTS
	RELAXATION TIME DISTRIBUTION TESTED ON THE DUAL NMR/EPR SPECTROMETER <u>K.Sannikov</u> (oral) LOW-FIELD NMR of ^{129}Xe at LOW TEMPERATURES: FREQUENCY and TEMPERATURE DEPENDENCES of SPIN- LATTICE RELAXATION in LIQUID and SOLID PHASES NEAR TRIPLE POINT		B.M . Mukhamadullin (oral) ^1H NMR MONITORING of DyF ₃ NANOPARTICLE AGGLOMERATION I.Romanova (oral) MODELING OF STRUCTURAL AND MAGNETIC PROPERTIES OF Gd _{1-x} R _x MO ₃ COMPOUNDS K.B. Tsiberkin (oral) TRANSITION BETWEEN TRANSVERSE RELAXATION AND REGULAR SPIN DYNAMICS IN DIPOLE CHAIN

Tuesday, 29 September

9:00-10.30 Plenary session

9:00–9:45 E. G. Bagryanskaya: APPLICATION OF NEW SPIN LABELS TO THE STUDY OF BIOMOLECULAR STRUCTURE

9:45–10:30 S. A. Dzuba. NANO-SCALE CLUSTERING OF MONO-SPIN-LABELED MOLECULES FROM DOUBLE ELECTRON-ELECTRON RESONANCE DATA

10:30-11.00 Coffee-break

	Room 1		Room 2
11:00-12:00	Modern methods of Magnetic resonance	11:00-12:00	Low-dimensional systems, nano-systems and molecular magnets
	I. Gimazov (oral) BROADBAND ESR SPECTROMETER BASED ON VNA AND ITS APPLICATION FOR FM MATERIALS G.Slvin(oral) WEIGHTED LEAST-SQUARES APPROACH to the WEAK-SIGNAL PROBLEM in ORIENTATIONAL STUDIES of GRAPHENE OXIDE MEMBRANES I.Frolov (oral) SEQUENTIAL RADICAL PAIR CIDNP		A.V. Shestakov (oral) DEPENDENCE OF THE FERROMAGNETIC–PARAMAGNETIC TRANSITION TEMPERATURE ON MICROWIRE SIZE IN Co₈₃Fe₇C₁Si₇B₂ and Fe₄₅Co₃₀Si₁₀B₁₅ D.A. Astvatsaturov (oral) EPR STUDY OF GRAPHITE OXIDES WITH DIFFERENT OXIDATION LEVELS E.I. Kovycheva (oral) MODELING OF THE MAGNETIC RESPONSE OF LOW-SCALED SPIN STRUCTURES

12:00–14:00 Break

14:00–17:00	Zavoisky Award Ceremony Zavoisky Awardee 2026 Lecture <i>Academy of Sciences of the Republic of Tatarstan Kazan, Bauman str., 20</i>
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Wednesday, 30 September

9:00-10.30 Plenary lectures

9:00–9:45 H. Ohta: MULTI-EXTREME THZ ESR: DEVELOPMENTS AND FUTURE DIRECTIONS

9:45–10:30 N. G. Romanov: OPTICALLY DETECTED CROSS-RELAXATION RESONANCES IN DIELECTRIC AND SEMICONDUCTOR CRYSTALS

10:30-11.00 [Coffee-break](#)

	Room 1		Room 2
11:00-12:50	Chemical and Biological Systems	11:00-13:00	Strongly Correlated Electron Systems
	O. A. Krumkacheva (invited) STRUCTURAL CHARACTERIZATION OF CONFORMATIONALLY HETEROGENEOUS BIOMOLECULAR COMPLEXES WITH PHOTOACTIVE LIGANDS BY PULSED DIPOLAR EPR SPECTROSCOPY A.F. Vanin (invited) DIMERIZATION OF NO MOLECULES AS THE INITIAL STAGE OF IRON DINITROSYL COMPLEXES FORMATION IN ANIMALS AND HUMANS. E. A. Konstantinova (invited) PHOTOELECTRONIC PROPERTIES OF OPTICAL SENSOR PLATFORMS BASED ON ANODIC ALUMINUM OXIDE N.E. Polyakov(oral) NMR STUDY OF SUPRAMOLECULAR DRUG DELIVERY SYSTEMS AND DRUGS INTERACTION WITH LIPID MEMBRANES		V. Glazkov (invited) MAGNETIC ORDER IN NABOKOITE FAMILY COMPOUNDS S. Kimura (invited) HIGH FIELD ESR MEASUREMENTS of the INTERACTING SPIN DIMER SYSTEMS A.Semenov (oral) ELECTRON SPIN RESONANCE PROBING OF ANTIFERROMAGNETIC STATE IN CeB₆ R. Eremina (oral) PROPERTIES of LUDWIGITE Cu₂MnBO₅ D.Popov(oral) IMPACT OF MANGANESE IONS ON MAGNETIC AND STRUCTURAL PROPERTIES OF COBALT CONTAINING LUDWIGITES
13:00–14:30	Break		

14.30-16:00	Chemical and Biological Systems	14.30-16:00	XXV International Youth Scientific School (School-2026)
	A. Yurkovskaya (invited) SHORT-LIVED CATION RADICALS VISUALIZED BY CIDNP A. Kokorin (invited) STRUCTURAL REORGANIZATION OF VO²⁺ COMPLEXES ON THE SURFACE OF TIO₂ I. Zhukov (oral) DISENTANGLEMENT OF INTRA- AND INTER-MOLECULAR PATHWAYS OF PHOTOINDUCED ELECTRON TRANSFER IN BIOMIMETIC TRP-PRON-F DYADS BY TIME-RESOLVED AND FIELD-CYCLING CIDNP		
16:00-16:30	Coffee-break		
16:30–17:15	Plenary session. S. Eaton: INVERSION RECOVERY EPR CHARACTERIZES THE IMPACT OF HEISENBERG EXCHANGE ON NITROXIDE T ₁ IN LOW VISCOSITY SOLUTIONS		
17:15-18:05	Chemical and Biological Systems		
	V.I. Chizhik (invited) COMPREHENSIVE USE of NMR METHODS in STUDYING MICROSTRUCTURE and MOLECULAR MOBILITY in IONIC LIQUID SYSTEMS Ph.V. Toukach (oral) AUTOMATED PREDICTION OF NATURAL CARBOHYDRATE STRUCTURE FROM 2D NMR DATA		

Thursday, 1 October

9:00-10:20	Advances in Magnetic Resonance Theory and Instrumentation
	A. Smirnov (invited) SPIN 3/2 PARAMAGNET, SPIN 1/2 QUANTUM CHAINS AND A WEAKLY ORDERED ANTIFERROMAGNET IN Cs^2CoCl_4 Y. Teki (invited) Π-TOPOLOGY, SPIN ALIGNMENT, DEP GENERATION AND ESPT OF PHOTOGENERATED ORGANIC MULTI-SPIN Π-SYSTEMS K. Salikhov (oral) USING NUCLEAR HYPERPOLARIZATION IN PHOTOINDUCED ELECTRON TRANSFER TO STUDY CHIRAL INDUCED ELECTRON SPIN SELECTIVITY

10:20-10:50 Coffee-break

10:50-12:50	Advances in Magnetic Resonance Theory and Instrumentation
	V.F. Tarasov, (invited): EFFECT OF QUANTUM INTERFERENCE UNDER SIMULTANEOUS EXCITATION OF MAGNETIC DIPOLE AND ELECTRIC QUADRUPOLE RESONANCE TRANSITIONS A. Sukhanov (invited) FEATURES OF ESEEM IN THE STUDY OF PHOTOSYSTEM I IN TREHALOSE MATRIX R.B. Zaripov (invited) MULTI-PULSE PROTOCOLS IN EPR: FROM SPECTRAL DIFFUSION SUPPRESSION TO QUANTUM ZENO ANALOGY Yuri E. Kandrashkin (oral) PHOTOINDUCED SPIN DYNAMICS IN RIGID CHROMOPHORE-RADICAL COMPOUNDS

14:30-16:30 Poster session 1

16:30-17:00 Coffee-break

17:00-19:00 Poster session 2

Friday, 2 October

9:00-9:45 Plenary session.

J. Zhao. STUDY OF THE PHOTOPHYSICS OF THE COMPACT ELECTRON DONOR-ACCEPTOR COMPOUNDS USING TIME-RESOLVED ELECTRON SPIN RESONANCE SPECTROSCOPY

9:45-10:45	Mossbauer spectroscopy		Related Phenomena
	E.Voronina (oral) NANOSCALE MAGNETIC INHOMOGENEITIES IN FE–AL ALLOYS WITH GA AND B ADDITIONS: STRUCTURE, STABILITY, AND TEMPERATURE EVOLUTION F..Vagizov (oral) INCREASING THE EFFICIENCY OF A SPECIAL WIRELESS COMMUNICATION SYSTEM BASED ON THE STOCHASTIC GAMMA-RAY FLOW A.L. Zinnatullin (oral) COMBINED MÖSSBAUER EFFECT AND DFT STUDIES OF THE HYPERFINE INTERACTIONS AND LATTICE DYNAMICS IN PHOSPHAFERROCENES		R. Mamin (oral) CONDUCTING AND SUPERCONDUCTING FILMS WITH LOCAL ELECTRIC FIELD ON INTERPHASES G. Andreev (oral) MAGNETIC HYSTERESIS OF PARAMAGNETIC LIDYF4: A MAGNETOCALORIC MODEL L. Grunin (oral) ENTROPY: A PERSPECTIVE BASED ON NMR RELAXATION TIMES
10:45-11:15	Coffee-break		
11:15-12:15	Advances in Magnetic Resonance Theory and Instrumentation	11:15-12:25	Strongly Correlated Electron Systems
	V. Zobov_(oral) QUANTUM DYNAMICS IN KRYLOV SPACE AND OPERATOR GROWTH: A STUDY USING MULTIPLE-QUANTUM NMR Ziatdinov R.R.(oral) TRANSFERRED HYPERFINE		V.Schaginyan (invited). TOPOLOGICAL FOUNDATIONS OF THE SCALING BEHAVIOR OF SUPERCONDUCTORS Yu. Bunkov (oral). A NEW PERMANENT MACROSCOPIC COHERENT QUANTUM STATE AT ROOM TEMPERATURE

	INTERACTIONS IN $\text{CAF}_2\text{:Pu}^{3+}$ ENDOR V.A. Ulanov (oral) DISPERSION SHAPE OF THE EPR SPECTRA LINES OF THE IMPURITY GD^{3+} IONS IN THE NARROW-GAP PB1-XAGXS SEMICONDUCTORS: PARAMETERS AND POSSIBLE NATURE OF THE EFFECT		I.V. Yatsyk (oral) ELECTRON-POLARON TRANSITION AND HIGH-TEMPERATURE PHONON DRAG IN $\text{Ca}_{0.3}\text{Sr}_{0.7}\text{Ti}_{0.3}\text{Mn}_{0.3}\text{O}_{3-\delta}$ PEROVSKITE
12:15-14:25	Chemical and Biological Systems		
	V.Volkov (invited) WATER MOLECULES AND BIOLOGICALLY ACTIVE SUBSTANCES IN RBC ON NMR DATA. M.V. Matveev (oral) THE INFLUENCE OF GRAPHENE OXIDE MEMBRANES ARCHITECTURE ON THEIR FUNCTIONAL PROPERTIES E. Kytina (oral) COMPARATIVE ANALYSIS OF PARAMAGNETIC CENTERS IN NANOSIZED ANODIC ALUMINUM OXIDE SYNTHESIZED IN ORGANIC AND INORGANIC ACIDS AND SUBJECTED TO ADDITIONAL ETCHING AND ANNEALING D.A. Saritsky (oral) ANALYSIS AND SIMULATION OF EPR SPECTRA OF IRON-DOPED BIOACTIVE GLASSES USING THE CZJZEK DISTRIBUTION		

	Ya. V. Fattakhov (oral) MRI INVESTIGATION OF THE DEVELOPMENT OF BIRD EMBRYOS Kh. Gainutdinov (oral). EPR STUDY OF NITRIC MONOXIDE CONTENT IN THE BRAIN OF RATS AFTER COMBINED BRAIN AND SPINAL CORD INJURY		
14:25-14:55	Coffee-break		
15:00	Closing ceremony		