PROGRAMME

33rd EUROPEAN ROTORCRAFT FORUM KAZAN, RUSSIA
CENTENARY OF THE FIRST HELICOPTER FLIGHT

MONDAY / 10 SEPTEMBER 2007

TIME\PLACE		
15:00 – 18:00	Registration	Registration Desk
18:00 – 20:00	International committee meeting	

TUESDAY AFTERNOON / 11 SEPTEMBER 2007

08:00 – 09:30	Registration	Registration Desk
09:30 – 10:00	Coffee	
10:15 – 13:00	Opening Ceremony and plenary meeting	Korston Hotel & Mall - Ballroom
13:00 – 14:15	Lunch	

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	Aerodynamics	**Aircraft Design 1**	**Structures and Materials**	**Acoustics**
14:15 – 14:40	Unsteady Flow Modeling of Helicopters Airfoils. Victor A. Anikin, Oleg V. Gerasimov, Boris S. Kritsky	Tsagi's Investigations in the Area of Rotorcraft Science and the Influence of these Investigations on Rotorcraft Efficiency. Vladimir A. Kargopoltsev, Mikhail A. Golovkin	Possibility of Application of Folded Structures for Enhancing Helicopter Radar Transparency. V.I. Khaliulin, A.V. Shabalov	Acoustic Flight Test of the Ec130 B4 in the Scope of the Friendcopter Project. H.J. Marze, M. Gervais, P. Martin, P. Dupont
14:40 – 15:05	The Effect of Far Vortex Wake on Induced Velocities in the Main Rotor Disk Plane and in Vortex Wake. V. M. Scheglova, R. M. Mirgazov	Multipurpose Ka-226 Helicopter Design Features. S.V. Mikheyev, L.P. Shiriayev,	Structural and Technological Aspects of Folded Cores Application in Helicopter Panels. A.V. Shabalov	Non Destructive and in situ Acoustic Testing of Inhomogeneous Materials. E. Tijs, H.E. de Bree, T.G.H.

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
		A.L. Pirozhnikov		Basten
15:05 – 15:30	Aerodynamics and flight dynamics of the aircraft in a vortex wake of the helicopter. Victor A. Anikin, Boris S. Kritsky, Veniamin A. Leontyev	TsAGI 1-EA the First Russian Helicopter. V.A. Kasianikov, G.I. Kuznetsov	Automation of Assembly Riveted Helicopter Panels and Units. P.L. Lyudogovski	Localization and tracking of aircraft with ground based 3D sound probes. T.G.H. Basten, H.E. de Bree, E. Tijs
15:30 – 15:55	Experimental-Calculated Investigation Flow Field in the Wake of Rotor at Flight Regimes with High Relative Velocity. Nikolay N. Tarasov, Valentina M. Scheglova	The Research on Helicopter Integrated Flight/Propulsion Control Technology. NI Xianpin, HU Chuandon, SUN Jiangu	Aircraft Functional Gradient Materials. K.A. Andrianova	
16:00 – 16:30	Coffee			
TIME\PLACE	**PUSHKIN-1 HALL**	**PUSHKIN-2 HALL**	**TOLSTOY HALL**	**DOSTOEVSKY HALL**
	Aerodynamics	**Aircraft Design**	**Structures and Materials**	**Acoustics**
16:30 – 16:55	Works On Improving ANSAT Helicopters Performance. V.A. Leontiev, N.N. Tarasov, A.O. Garipov, V.B. Kartashov, V.I. Ovchinnikov, V.K. Yakubov	A New Concept of the Main Rotor for High-Speed Single-Rotor Helicopter. N.S. Pavlenko	Old Aircraft, New Failures. Bernice Robinson	A Study of Closed Loop Control for BVI Noise Reduction by Multiple Pressure Sensors. Kobiki Noboru, Shigeru Saito, Hiroaki Fuse
16:55 – 17:20	The Ka-226 helicopter flight characteristics and their compliance with the modern requirements.	Helicopter History: Implications of the Von Baumhauer Archive.	Organophosphorus Polymeric Materials: Aviation Application Prospects.	Fast in-flight cabin interior sound source localization.

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	B.F. Vassiliev, V.N. Kvokov, F.N. Pavlidi, E.A.Petrosiyan, E.B. Feofilov	Alexander J. de Voogt	L.M. Amirova	E. Tijs, H.E. de Bree, J. Voogdt, T.G.H. Basten
17:20 – 17:45	Mathematical modeling of Ka-226/Ka-26 helicopter main rotor blade flapping motion at rotor acceleration/deceleration in wind conditions. B.N. Burtsev, V.I. Ryabov, S.V. Selemenev	Vertical Take-Off and Landing Vehicle. Vladimir A. Pavlov, Airat I. Shigapov, Vitaly V. Pavlov	Process Improvement for Creation Products from Composites by Adjustment of Surface Energy and Interface Interactions. A.F. Magsumova, M.M. Ganiev, L.M. Amirova	
17:45 – 18:05	Approximated methods of helicopter control optimization. V.N. Kvokov V.I. Gurman, V.Y. Ukhin			
18:05	End of Sessions			
19:30 – 21:30	Civic reception at Kazan City Hall			

WEDNESDAY MORNING / 12 SEPTEMBER 2007

08:00 – 08:45	Registration		Registration Desk	
TIME\PLACE	**PUSHKIN-1 HALL**	**PUSHKIN-2 HALL**	**TOLSTOY HALL**	**DOSTOEVSKY HALL**
	Aerodynamics	**Aircraft Design**	**Structures and Materials**	**Operation Aspects**
09:00 – 09:25	Experimental Investigation of Aerodynamic Interactions on a Tilt-Rotor Configuration And Comparison with Navier Stokes Computations.	Co-Axial Rotors with Symmetrical Disposition of Wash Plates.	Analysis of the bearing behaviour of composite riveted assemblies, for the crash prediction of composite helicopter structures.	Delivering Fleet Life Management to the Operator.

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	T. Lefebvre, C. Rondot, P. Sainton, D. Favier	Vladimir G. Gaynutdinov	David Delsart, Jean-Michel Mortier, Alain Deudon, Alice Vagnot, Romuald Fallet	A.A. ten Have
09:25 – 09:50	Extensive wind tunnel tests measurements of dynamic stall phenomena on the OA209 airfoil including 3D effects. A. Le Pape, G. Pailhas, F. David, J.-M. Deluc	High-Speed Helicopter Control System. Vladimir A. Pavlov, Mikhail V. Ogorodov, Ildar F. Gazizov	Hydraulic actuators for fatigue tests of helicopter assemblies. M. Nemirovsky, V. Bolotin	Fleet Management System for an Advanced Helicopter Platform – Requirements Analysis. Axel Schauenburg, Arvind K. Sinha
09:50 – 10:15	Conditional Averaging Methodology for Periodic Data with Time Jitter and Spatial Scatter. Berend G. van der Wall, Oliver Schneider	On Structure of the System of Statistical Analysis of Design Parameters. I.I. Fedorov, I.I. Fedorov – jr, L.I. Fedorova	Water Impact of Composite Material Structures. Marco Anghileri, Luigi-M L Castelletti. Edoardo Francesconi	Preliminary Studies on Health and Usage Monitoring System Architecture for the NH-90 Rotorcraft Platform - Further Developments. Dipesh K. Parekh, Arvind K. Sinha
10:15 – 10:40	Rotor Aerodynamics and Performance Study of a High-Altitude, Long-Endurance VTOL UAV. Preston B. Martin	Comparative Study of Optimal Active Twists for Helicopter Rotor Blades with C and D-Spars. Andrey Kovalov, Evgeny Barkanov, Sergey Gluhih	On the Mutual Effect of Deformations of a Two-Bladed Hooke's Joint Type Autogiro Main Rotor with a Flexible Member. O.Y. Polyntsev	
10:40 – 11:05	Performance Analysis of Smart UAV Using CAMRAD II. Yushin Kim, Seong-Wook Choi,	Investigation, Development and Tests Results of the Variable Geometry Rotor. R. Turmanidze, L. Dadone, J. J.	Selection of Spring Dynamic Fluctuations Dampe Parameters of Helicopter Rotor Blade. Pavel A. Rumjantsev, Evgenyi I.	

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	Jai Moo Kim	Philippe, B. Demaret	Nikolaev	
11:05 – 11:35	Coffee			
TIME\PLACE	**PUSHKIN-1 HALL**	**PUSHKIN-2 HALL**	**TOLSTOY HALL**	**DOSTOEVSKY HALL**
	Aerodynamics	**Aircraft Design**	**Structures and Materials**	**Operation Aspects**
11:35 – 12:00	Navier–Stokes Computations Applied to Tilt-Rotors. J. Decours, T. Lefebvre	Advanced Technologies for a future Heavy Transport Helicopter. W. Koletzko, R. Burgmair, W. Kreitmair-Steck, C. Weimer	Catastrofical Changes of Shape of Folded Systems. Vladimir Pavlov, Vitaly V. Pavlov	Helicopter Accidents: Data-Mining the NTSB Database. Alexander J. de Voogt, Robert R.A. van Doorn
12:00 – 12:25	Viscous Flow Simulation of Rotor Blades With Tip Slots in Hover. Ju Yeol You, Oh Joon Kwon, Yong Oun Han	Design and Feasibility Study of a Turboshaft Equipped Two Seat Kitcopter. Patrick Hendrick, Frank Buysschaert	A Methodology for the Derivation of a Rotor Blade Flutter Determinant in Forward Flight. S. A. Mikhailov, E. I. Nikolaev, N.A. Shilova	An analysis of helicopter accidents in New Zealand 1996-2005 and the United Kingdom 1986-2005. Arnab Majumdar, Kelvin Mak, Claire Lettington
12:25 – 12:50	Aerodynamic Computations of Isolated Fenestron® in Hover Conditions. Edith Mouterde, Laurent Sudre, Andre-Michel Dequin, Alessandro D'Alascio, Pierre Haldenwang	The EC135 drive train - Analysis and improvement of the fatigue strength. Andreas Doleschel, Stefan Emmerling	Aeroelastic Stability Analysis of Two Hingeless Rotors. Italo Cafarelli, Khiem Van Truong, Stewart Hopkins, Thomas Maier	
13:00 – 14:15	Lunch			

WEDNESDAY AFTERNOON / 12 SEPTEMBER 2007

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	Aerodynamics	**Aircraft Design**	**Structures and Materials**	**Avionics**

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
14:15 – 14:40	Simulation of transient aerodynamic characteristics of oscillating airfoil. Victor A. Anikin, Aleksey V. Kosheev	Development of the Robust System Design Process for Unmanned Rotorcraft. Hyeong-Uk Park, Ho-Jung Kang, Guk-Hyun Cho, Jae-Woo Lee, Yung-Hwan Byun, Yung H. Yu	Whirl Flutter Stability Analysis of a Tiltrotor Aircraft Including Various Aerodynamic Models. Taeseong Kim, SangJoon Shin	Pilot-in-the-Loop Evaluation of a Novel Acceleration Vector for the RNLAF AS-532 U2 Cougar Helicopter HUD. Antoine de Reus, Marcel van Witzenburg
14:40 – 15:05	CFD investigation of deflection effect of trim tab and tail of a rotor blade profile on aerodynamic characteristics. V.G. Soudakov, V.A. Ivchin	Unified Tilt Rotor Handling Qualities; Feasible or Impracticable? Part I: Setting the Challenge. Neil Cameron, Philip Perfect, Gareth Padfield, Daniel Walker	Stochastic Aeroelastic Analysis of Composite Helicopter Rotor. M. Senthil Murugan, R. Ganguli, Dineshkumar Harursampath	Flight Director for Sling Load Handling – First Experiences on CH53. M. Hamers, E. von Hinüber
15:05 – 15:30	Trimmed CFD Simulation of a Complete Helicopter Configuration. W. Khier, M. Dietz, T. Schwarz, S. Wagner		Process features of light aircrafts sheet skin stretch-wrap forming. Nikolay N. Sosov, Vladimir N. Mantsev	
15:30 – 16:00	Coffee			

WEDNESDAY AFTERNOON / 12 SEPTEMBER 2007

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	Aerodynamics	**Flight Mechanics**	**Simulation and training**	**Avionics**
16:00 – 16:25	Active Rotor Performance Investigations Using CFD/CSD Weak Coupling.	Static Stability and Controllability of Helicopter with an External Load.	Helicopter Flight Simulations. Problems and Advances.	PAVE: A Prototype of a Helicopter Pilot Assistant System.

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	M. Dietz, E. Krämer, S.Wagner, A. Altmikus	Alexander N. Sviridenko, Alexander M. Volodko	Andrew G. Bushgens	Thomas Lüken
16:25 – 16:50	Investigations of Aerodynamic Performance of Bell 412 Helicopter in Real-time Flight Conditions. H. Xu, S. Zhang, N. Ball, A. Gubbels	Applying artificial neural networks to create a helicopter dynamic mathematical model on the basis of flight test data. Victor A. Anikin, Yurii N. Sviridenko	The Helicopter Math Model Integration with the SIMULINK Software Package, and Research for the Mi-172 Helicopter Automatic Flight Control System Algorithms Development. S.Y. Esaulov, A.P. Vaintrub, T.V. Ivakova	First Control System Evaluation of the Research Helicopter FHS (Flying Helicopter Simulator). Mario Hamers, Robin Lantzsch
16:50 – 17:15	Developing insights using CFD – Tail rotor CFD analysis and design. Alan Brocklehurst, Rene Steijl, George Barakos	Full Autopilot for Small Electrical Helicopter. Andrey E. Barabanov, Nikolai Yu.Vazhinsky, Dmitry V. Romaev	Investigation on the Simulation of Helicopter/Ship Operations. Maarten Foeken, Marilena D. Pavel	A Comparison of Helicopter Pressure Error Correction Test Methods. Mark Roots
17:15 – 17:40	The GOAHEAD Project. Klausdieter Pahlke	Rotary Wing UAV System Identification for Flight Control Design. Filippo Zanetti, Barbara Teodorani, Gian Marco Saggiani, Roberto Pretolani	First Steps towards Certification of the IAR-330 Puma Naval for Helicopter-Ship Operation. Marilena D. Pavel, Peter Booij, Sorin Stefan Radnef, Achim Ionita.	
17:40	End of Sessions			

THURSDAY MORNING / 13 SEPTEMBER 2007

08:00 – 08:45	Registration		Registration Desk	
TIME\PLACE	**PUSHKIN-1 HALL**	**PUSHKIN-2 HALL**	**TOLSTOY HALL**	**DOSTOEVSKY HALL**
	Aerodynamics	**Flight Mechanics**	**Aircraft System & Cost**	**Testing**

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
			Reduction	
09:00 – 09:25	The blind-test activity of the GOAHEAD project. O.J. Boelens, G. Barakos, M. Biava, A. Brocklehurst, M. Costes, A. D'Alascio, M. Dietz, D. Drikakis, J. Ekaterinaris, I. Humby, W. Khier, B. Knutzen, F. Le Chuiton, K. Pahlke, T. Renaud, T. Schwarz, R. Steijl, L. Sudre, L. Vigevano, B. Zhong	Flight Test of a Video-Based Automatic Station-Keeping System: Tracking Targets on the Ground. Gregory Craig, Bill Gubbels, Marc Prystay, Andy Ball, Stephan Carignan, Carl Swail, Kris Ellis, Rob Erdos, Sion Jennings & Todd Macuda	Peculiar Aspects of Rotary-Wing UAV Complexes Used for Aerial Monitoring Mission. Victor A. Anikin, Yurii V. Shibanov	Results of Mi-38 Helicopter Flight Tests. A.G. Samusenko, N.S. Pavlenko, N.I. Chalov, I.I. Klevantsev, A.M. Klimov, M.G. Rozhdestvenskiy
09:25 – 09:50	A Simple CFD/CSD Loose Coupling Approach for Rotor Blade Aeroelasticity. Yasutada Tanabe, Shigeru Saito	Modelling of helicopter low velocity flight and correlation with flight test data. Krzysztof Gajda, Przemyslaw Bibik, Janusz Narkiewicz, Zbigniew Kazulo	Conceptual Design of an Interoperable Vertical Take-off Unmanned Aerial Vehicle for Operation with Unmanned Ground Vehicle – Evaluation. Joseph Khreish, Dr Arvind K. Sinha	Experimental Investigation of Scissors-Type Tail Rotor Model Aimed at Perfection of its Aerodynamic Performance. K.B. Samsonov, V.A. Ivchin
09:50 – 10:15	Numerical Prediction of Hovering Rotor Tip Vortex using Vortex Tube Model Boundary Condition. Wooyoung Choi, Jiyoung Jung, Soogab Lee, Hyosung Sun	An Optimal Helicopter Control Method in Autorotation. Przemysław Bibik, Krzysztof Gajda, Janusz Narkiewicz	Systems of Spatial Orientation for Helicopter Scanners of Oil and Gas Pipelines. Vitaly V. Dudnik, Yury A. Batishev	Development of a Mach-scaled Swashplateless Rotor with Embedded Trailing-Edge Flaps. Keith Allen, Jayant Sirohi, Inderjit Chopra
10:15 – 10:40	High-Accurate Cartesian Partitioning Methods. Application to Rotor Flows.	Pitch Bounce Oscillation of a Long and Heavy Tandem-Suspended Helicopter Underslung Load.	Remotely Piloted High-Speed Helicopter Disc Wing Devices.	Ornicopter Model Ground Testing.

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	O. Saunier, S. Péron, G. Jeanfaivre, C. Benoit	T. W. G. de Laat, M. D. Pavel, N. A. Heerink	Vladimir A. Pavlov, Yaroslav V. Ivanov, Aleksey V. Melnichnov	D.J. van Gerwen, Th. van Holten
10:40 – 11:05	Numerical simulations of the Blade Vortex Interaction and the Vortex Ring State using a fully time marching unsteady wake model. Benoit Rodriguez	Analysis of Helicopter Mission Task Elements by Using Nonlinear Optimal Control Method. Chang-Joo Kim, Seong Nam Jung, Jaewoo Lee, Young Hwan Byun, Young Yoo		Flight Testing of Pioneer Bridges as Helicopter Slung Loads Using a CH-53G. H. Brenner
11:05 – 11:35	Coffee			

THURSDAY MORNING / 13 SEPTEMBER 2007

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	Aerodynamics	**Dynamics**	**Aircraft System & Cost Reduction**	**Testing**
11:35 – 12:00	Construction a Spline-Function for Interpolation of Intensity of Circulation on a Disk of the Rotor of the Helicopter. Anton A. Bushuev, Evgenyi I. Nikolaev	High-Speed Helicopter Disc Wing Devices Dynamics. Vladimir A. Pavlov, Aleksey V. Melnichnov, Yaroslav V. Ivanov	The Maximum Maintenance Mastery at Eurocopter. G. Poncelin, A. Lefebvre, P.L. Maisonneuve, M. Glade, J.P. Derain	Skid Landing Gear Drop Weight Tests and Simulation of Helicopter Emergency Landing. J.A. Denisov, S.A Mikhailov., D.V. Nedelko, A.A. Shebotnev
12:00 – 12:25	Actuator design for the .active trailing edge of a helicopter rotor blade. Christoph K. Maucher, Boris A. Grohmann, Peter Janker,	Unified Tilt Rotor Handling Qualities; Feasible or Impracticable? Part II: Control Concepts. Philip Perfect, Neil Cameron, Gareth Padfield, Dan Walker	Multi-role Helicopter Life Cycle Cost (LCC) Optimisation: The Pre-Design Strategy. Jan-Floris Boer, Jos Stevens, Jos Vankan, Wim Lammen	Adaptive control of dynamic test rigs using complex algebra. Igor V. Bolotin

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	Andree Altmikus, Horst Baier			
12:25 – 12:50	Effect of Helicopter Fuselage Airflow Conditions on Fins Stress Load. Igor Kolesnikov	Modelling, Design and Rapid Prototyping of Control Laws for the Bell-412 Advanced Systems Research Aircraft. Binoy J. Manimala, Daniel J. Walker, Mark Voskuijl		Computational maintenance of rotorcraft fatigue testing by advanced program tools. Yu.S. Aleksandrin, I.V. Butochnikov, V.V. Chedrik, A.B. Kudryashov, V.M. Uskov
13:00 – 14:15	Lunch			

THURSDAY AFTERNOON / 13 SEPTEMBER 2007

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	Engines and Propulsion	**Aerodynamics**	**Dynamics**	**Testing**
14:15 – 14:40	Pratt & Whitney Canada Turboshaft Engines: Product and Technology. Evolution. C. Litalien	Modeling Fluid Structure Interaction for Aerospace Applications. A. Aksenov, K. Iliine, A. Schelayev, A. Garipov, T. Luniewsky, V.Shmelev	Model Based H∞ Control for Helicopter Vibration Reduction - Flight Tests with Active Trailing Edge Flaps. Oliver Dieterich, Peter Konstanzer, Dieter Roth	Procedures Used to Analyse Helicopter Landing Impact Characteristics with Account of Landing Surface Properties. Yu.S. Aleksandrin, V.P. Timokhin
14:40 – 15:05	Computer-Assisted Refinement of GTE Combustion Chambers. B.G. Mingazov	Application of CFD/CSD Coupling for Analysis of Rotocraft Airloads and Blade Loads in Maneuvering Flight. Mahendra J. Bhagwat, Robert A. Ormiston, Hossein A. Saberi and Hong Xin	Experimental Investigation of an Active Twist Model Rotor Blade under Centrifugal Loads. Peter Wierach, Johannes Riemenschneider, Frauke Hoffmann	Full scale fatigue tests of the cargo helicopter Mi-26 fuselage Alexander M. Sorokin, Vladislav P. Turko
15:05 – 15:30	Modeling of Power Plant of the Helicopter "ANSAT" by the Help of a Program Complex GRAD EP.		Application of special problems of system motion analysis in rotorcraft designing and testing analysis.	

TIME\PLACE	PUSHKIN-1 HALL	PUSHKIN-2 HALL	TOLSTOY HALL	DOSTOEVSKY HALL
	B.M. Osipov		V.G. Gainytdinov, A.I. Golovanov, E.V. Kasymov, V.A. Shuvalov	
15:30 – 16:30	Coffee			
	PUSHKIN HALL			
16:30 – 17:00	Closing meeting			
17:00	End of Sessions			

THURSDAY EVENING / 13 SEPTEMBER 2007

19:30 – 23:00	Forum dinner

FRIDAY MORNING / 14 SEPTEMBER 2007

09:00 – 14:30	Technical visit to Kazan Helicopters Joint Stock Company

SOCIAL PROGRAMME

Civic Reception

Tuesday 11 September 19:30 hrs

This will be held in Kazan City Hall and will be hosted by the Mayor of Kazan.
Drinks and snacks will be served. Accompanying persons are welcome to attend.

SIGHTSEEING PROGRAMME

Boat trip to the Sviyazhsk island

Wednesday 12 September 14:30 - 21:30

Kazan of the XIX and XX centuries

Wednesday 12 September 19:00 - 20:00