

---

# Conference schedule

---

Conference Hall



Open Systems 2010  
Novosibirsk

---

## Monday, July 5

<b>08.30-09.30</b>		<b>Registration</b>
<b>09.30-09.50</b>		<b>Opening of the Conference</b>
<b>09.50 -11.20</b>		<b>Chairman: A.A.Ivanov</b>
09.50	<b>T.Imai</b>	<i>Status and Plan of GAMMA 10 Tandem Mirror Program</i>
10.35	<b>E.P.Kruglyakov</b>	<i>Novosibirsk Mirrors: Past, Present and Future</i>
<b>11.20-11.40</b>		<b>Coffee break</b>
<b>11.40 -12.40</b>		<b>Chairman: T.Imai</b>
11.40	<b>M.Tuszewski</b>	<i>Combined FRC and Mirror Plasma Studies in the C-2 Device</i>
12.00	<b>J.K.Anderson</b>	<i>Majority Ion Heating by Neutral Beam Injection and Confinement of Fast Ions in the Madison Symmetric Torus Reversed Field Pinch</i>
12.20	<b>R.Ellis</b>	<i>The Maryland Centrifugal Experiment: Centrifugal Confinement and Velocity Shear Stabilization of Plasmas in Shaped Open Magnetic Systems</i>
<b>12.40--13.00</b>		<b>Photographing</b>
<b>13.00--14.00</b>		<b>Lunch</b>
<b>14.00 -15.50</b>		<b>Chairman: M.Tuszewski</b>
14.00	<b>P.A.Bagryansky</b>	<i>Confinement of Hot Ion Plasma with <math>\beta=0.6</math> in the Gas Dynamic Trap</i>
14.35	<b>T.C.Simonen</b>	<i>Extrapolation of GDT Results to a Neutron Source for Fusion Materials Testing</i>
15.10	<b>A.Yu.Chirkov</b>	<i>Plasma Kinetics Models for Fusion Systems Based on the Axially-Symmetric Mirror Devices</i>
15.30	<b>T.D.Akhmetov</b>	<i>Possible Further Steps for Upgrading the GDT Device</i>
<b>16.00--16.20</b>		<b>Coffee break</b>
<b>16.20 -17.40</b>		<b>Chairman: A.V.Arzhannikov</b>
16.20	<b>A.Ando</b>	<i>Measurement of a Super-Alfvénic Plasma Flow Passing through a Diverging Magnetic Field</i>
16.40	<b>I.A.Kotelnikov</b>	<i>Equilibrium of High-<math>\beta</math> Plasma with Sloshing Ions above the Mirrorinstability Threshold</i>
17.00	<b>I.V.Romadanov</b>	<i>Space Propulsion Based on High-Beta Magnetic Fusion Rocket</i>
17.20	<b>S.V.Ryzhkov</b>	<i>Open Ended Magnetic Systems for Magneto-Inertial Fusion</i>
<b>18.30</b>		<b>Welcome party</b>

---

## Tuesday, July 6

<b>09.00 -10.35</b>		<b>Chairman: B.Unterberg</b>
09.00	<b>A.Kreter</b>	<i>Reactor-relevant Plasma-Wall Interaction Studies in Linear Plasma Devices</i>
09.35	<b>A.A.Shoshin</b>	<i>Plasma-Surface Interaction during ITER Type I ELMs: Comparison of Simulation with QSPA Kh-50 and the GOL-3 Facilities</i>
09.55	<b>B.Schweer</b>	<i>Spectroscopy on Laser Released Particles from Plasma Facing Materials in a Tokamak</i>
10.15	<b>Y.Nakashima</b>	<i>Research Plan for Divertor Simulation Studies and Its Recent Results Using the GAMMA 10 Tandem Mirror</i>
<b>10.50 -11.10</b>		<b>Coffee break</b>
<b>11.10 -12.25</b>		<b>Chairman: T.C.Simonen</b>
11.10	<b>A.V.Burdakov</b>	<i>Concept of Fusion Reactor Based on Multi-Mirror Trap</i>
11.45	<b>I.V.Timofeev</b>	<i>Simulations of turbulent plasma heating by powerful electron beams</i>
12.05	<b>A.V.Arzhannikov</b>	<i>Subterahertz Emission at Strong REB-plasma Interaction in Multimirror Trap GOL-3</i>

<b>13.00--14.00</b>		<b>Lunch</b>
<b>14.00 -15.50</b>		<b>Chairman: A.V.Burdakov</b>
14.00	<b>I.Katanuma</b>	<i>The Flute Mode Fluctuations and Associated Radial Transport in the GAMMA10 Divertor</i>
14.35	<b>V.P.Pastukhov</b>	<i>Turbulent Convection and Anomalous Cross-Field Transport in Mirror Plasmas</i>
15.10	<b>A.D.Beklemishev</b>	<i>Tail-Waving System for Active Feedback Stabilization of Flute Modes in Open Traps</i>
15.30	<b>V.V.Prikhodko</b>	<i>Low-Frequency Oscillations of Plasma in the Gas Dynamic Trap</i>
<b>16.00--16.20</b>		<b>Coffee break</b>
<b>16.20 -18.15</b>		<b>Chairman: V.P.Pastukhov</b>
16.20	<b>M.Ichimura</b>	<i>Radial Transport of High-Energy Ions due to Low Frequency Fluctuations in the GAMMA 10 Tandem Mirror</i>
16.55	<b>M.S.Korzhevina</b>	<i>Study of Microinstabilities in Anisotropic Plasmoid of Thermonuclear Ions</i>
17.15	<b>Y.Miyata</b>	<i>Correlation Analysis of Electrostatic Fluctuation between Central and End Cells in GAMMA 10</i>
17.35	<b>A.V.Sidorov</b>	<i>Non-equilibrium Heavy Gases Plasma MHD-Stabilization in Axisymmetric Mirror Magnetic Trap</i>
17.55	<b>I.S.Chernoshtanov</b>	<i>Alfvén Ion-cyclotron Instability in Mirror Trap with High-anisotropic Plasma</i>
<b>18.15--18.40</b>		<b>Coffee break</b>
<b>18.40</b>		<b>Concert (Conference hall)</b>

---

## Wednesday, July 7

<b>09.00 -12.30</b>		<b>POSTER SECTION: It is highly recommended to post presentations on Monday and remove on Friday</b>
09.00	1	<b>A.D.Beklemishev</b> <i>Three-Dimensional Force-Free Equilibria in Open Traps Driven by Electron Beams</i>
	2	<b>A.V.Sudnikov</b> <i>MHD Activity in GOL-3 at the Stage of Plasma Cooling</i>
	3	<b>A.A.Skovoroda</b> <i>About A Role of Mean Curvature in Magnetic Mirror Geometry</i>
	4	<b>V.V.Arsenin</b> <i>MHD Stability of a Plasma in a System of Coupled Axisymmetric Adiabatic Open-ended Traps</i>
	5	<b>I.A.Ivanov</b> <i>Stabilization of Relativistic Electron Beam by Dense Plasma Cloud in GOL-3 Expander</i>
	6	<b>A.Yu.Chirkov</b> <i>Drift Instabilities and Collisionless Plasma Transport in Non-Uniform Poloidal Magnetic Configurations</i>
	7	<b>D.I.Skovorodin</b> <i>Numerical Kinetic Model of Axial Confinement in a Mirror Trap</i>
	8	<b>V.A.Kurnaev</b> <i>Strongly Nonparaxial Mirror Magnetic Confinement Systems Based on the Dipole Geometry</i>
	9	<b>H.Takeno</b> <i>Simulation Experiments of Traveling Wave Direct Energy Converter on GAMMA 10 Tandem Mirror</i>
	10	<b>H.Takeno</b> <i>Charge Separation and Deceleration of High Density Plasma in a Cusp Type Direct Energy Converter Simulator</i>
	11	<b>G.I.Dimov</b> <i>Feasible Scenario of Creation and Burning of Fusion Plasma in Ambipolar D-T Reactor</i>
	12	<b>G.I.Dimov</b> <i>Multicusp Trap with Circular Geometry for Confinement of Low-temperature Plasma</i>
	13	<b>V.I.Volosov</b> <i>Problems of the ACT Reactor (the P11B Reaction)</i>
	14	<b>A.Hagnestål</b> <i>Theoretical Field and Coil Design for a Single Cell Minimum-B Mirror Hybrid Reactor</i>
	15	<b>A.V.Anikeev</b> <i>The GDT Based Neutron Source as a Driver in a Sub-critical Burner of Radioactive Wastes</i>
	16	<b>E.D.Gospodchikov</b> <i>On the Possibility of ECR-discharge with Overcritical Plasma Density in Axisymmetrical Magnetic Trap</i>
	17	<b>E.D.Gospodchikov</b> <i>Influence of Magnetic Field Directions Inhomogeneity on Longitudinal Propagation of Wave Beams</i>
	18	<b>K.Hosoi</b> <i>Investigation of Plasma Behavior during the ECRH Injection in GAMMA 10</i>
	19	<b>M.Yoshikawa</b> <i>Fluctuation Suppression during Confining Potential Formation in the Tandem Mirror GAMMA 10</i>
	20	<b>H.Kondou</b> <i>Effect of Electron Cyclotron Wave Polarization on Plasma Heating and Peripheral Ion Loss in GAMMA 10 ECRH</i>

09.00	21	<b>M.Ota</b>	<i>Development of 28 GHz-1 MW Gyrotron for GAMMA10 ECRH</i>
	22	<b>T.Kariya</b>	<i>Development of Mega-Watt Gyrotrons for Fusion Research</i>
	23	<b>R.Minami</b>	<i>High Power ECH Experiments for Direct Bulk Electron Heating in Central-Cell Region Plasmas on GAMMA 10 Tandem Mirror</i>
	24	<b>H.Aoki</b>	<i>Improvement of ECRH Elliptical Mirror Antenna for GAMMA 10</i>
	25	<b>Y.Yamaguchi</b>	<i>Ion-Cyclotron Resonance Heating Experiment in the Quadruple Minimum-B Field on GAMMA 10</i>
	26	<b>F.Yaguchi</b>	<i>Observation of the Flute-type Fluctuation by Using the Gold Neutral Beam Probe in GAMMA 10</i>
	27	<b>V.V.Maximov</b>	<i>DD Product Yield in the GDT Central Cell</i>
	28	<b>S.V.Polosatkin</b>	<i>Advanced Neutral Particle Analyzer for Fusion Plasma Diagnostics</i>
	29	<b>V.I.Batkin</b>	<i>Development of New Neutral Beam Injection System on GOL-3 Facility</i>
	30	<b>A.S.Arakcheev</b>	<i>Formation of Small Dust Particles by Brittle Destruction</i>
	31	<b>A.A.Shoshin</b>	<i>Structure Modification of Different Graphite and Glassy Carbon Surfaces under High Power Action by Hydrogen Plasma</i>
	32	<b>A.Smirnov</b>	<i>Neutral Beam Dump With Cathodic Arc Titanium Gettering</i>
	33	<b>A.A.Listopad</b>	<i>Characterization of RUDI Neutral Beam Parameters by Optical Diagnostics</i>
	34	<b>V.Dudnikov</b>	<i>Advanced Large Volume Surface Plasma H-/D- Source (LV SPS) for neutral beam injectors</i>
	35	<b>S.V.Murakhtin</b>	<i>Neutral Beam System of the Gas Dynamic Trap</i>
	36	<b>I.V.Shikhovtsev</b>	<i>A Continuously Operated 70mA, 50keV Proton Source for Plasma Diagnostic and Other Applications</i>
	37	<b>N.Sorokina</b>	<i>Study of Plasma on the GOL-3 Facility by Imaging VUV Spectroscopy</i>
	38	<b>H.Iizumi</b>	<i>Studies of GAMMA 10 ECRH Characteristics from the Soft X-rays Measurement</i>
	39	<b>S.S.Popov</b>	<i>Upgrading of Thomson Scattering System for Measurements of Spatial Dynamics of Plasma Heating in GOL-3</i>
	40	<b>N.Nishino</b>	<i>High-speed Imaging of Edge Plasma in the GAMMA 10 Tandem Mirror</i>
	41	<b>A.V.Lvovskiy</b>	<i>Line Plasma Density Measurement in the Gas Dynamic Trap with Dispersion Interferometer</i>
	42	<b>V.S.Burmasov</b>	<i>CO2 Interferometer for GOL-3 Multimirror Trap</i>
	43	<b>S.L.Sinitsky</b>	<i>Influence of Diode Geometry and Voltage Pulse Profile on REB Parameters of U-2 Accelerator</i>
	44	<b>S.L.Sinitsky</b>	<i>Energy Spectrum of Electrons in Flow from Plasma Column Heated by REB at GOL-3 Facility</i>
	45	<b>V.V.Postupaev</b>	<i>Experiments with Gradual-Energy-Growth Electron Beam at GOL-3</i>
	46	<b>I.V.Timofeev</b>	<i>Direct Computation of the Growth Rate for the Instability of a Warm Relativistic Electron Beam in a Magnetized Plasma</i>
	47	<b>V.T.Astrelin</b>	<i>Physical Basis for the Use of Long Pulse Electron Beam in Multi-mirror Trap</i>
	48	<b>V.I.Erofeev</b>	<i>High-informative Theorizing in Plasma Physics: Basic Principles and Importance for Researches on Beam-Plasma Heating, Plasma Confinement and Transport Phenomena</i>
	49	<b>V.Vshivkov</b>	<i>Numerical Modeling of Plasma Dynamics in Non-uniform Magnetic Field</i>
	50	<b>A.Snytnikov</b>	<i>3D Particle-In-Cell Simulation of the Beam-Plasma System</i>
	51	<b>I.V.Kandaurov</b>	<i>Submillisecond Electron Beam for Plasma Heating in Multi-mirror Trap GOL-3</i>
<b>10.30--10.50</b>			<b>Coffee break</b>
<b>12.30--13.30</b>			<b>Lunch</b>
<b>13.15</b>			<b>Bus to ship tour and barbeque (departure from "Golden Valley")</b>

---

## Thursday, July 8

09.30 -10.30

**Chairman: B.Schweer**

09.30	<b>A.L.Solomakhin</b>	<i>Measurement of Plasma Density in Modern Fusion Devices by Dispersion Interferometer</i>
09.50	<b>D.Den Hartog</b>	<i>Advances in Time-Resolved Measurement of Magnetic Field and Electron Temperature in Low-magnetic-field Plasmas</i>

10.10	<b>V.I.Davydenko</b>	<i>Development of Focused Neutral Beams With Small Angular Divergence For Plasma Heating And Diagnostics</i>
<b>10.35--10.55</b>		<b>Coffee break</b>
<b>10.55 -12.45</b>		<b>Chairman: I.Katanuma</b>
10.55	<b>V.L.Vdovin</b>	<i>Physics and Scenarios of ICRF Plasma Heating in Mirror Traps</i>
11.30	<b>H.Takeno</b>	<i>Rotating RF System for Novel Control of a Magnetoplasma Thruster</i>
12.05	<b>V.E.Moiseenko</b>	<i>Radio-Frequency Heating in Straight Field Line Mirror Neutron Source</i>
12.25	<b>A.J.Fetterman</b>	<i>Wave Induced Supersonic Rotation in Mirrors</i>
<b>13.00--14.00</b>		<b>Lunch</b>
<b>14.00 -15.50</b>		<b>Chairman: D.Den Hartog</b>
14.00	<b>V.G.Zorin</b>	<i>Heavy gas ECR breakdown in open mirror trap</i>
14.35	<b>V.V.Postupaev</b>	<i>Experiments with "Thin" Electron Beam at GOL-3</i>
15.10	<b>A.A.Kabantsev</b>	<i>"Chaotic" Neoclassical Transport at Azimuthally Perturbed or Wave-Mingled Separatrix</i>
15.30	<b>V.G.Sokolov</b>	<i>Experimental Observation of Zonal Flow and Its Scalings in Axisymmetric Magnetic Field</i>
<b>16.00 -16.20</b>		<b>Coffee break</b>
<b>16.20 -17.40</b>		<b>Chairman: V.E.Moiseenko</b>
16.20	<b>S.Taczanowski</b>	<i>Transmutations of Actinides in Open Magnetic Confinement Systems – a Model Fusion-Fission Alliance</i>
16.40	<b>K.Noack</b>	<i>Neutronic Model of a Mirror Based Fusion-Fission Hybrid for Power Generation and Incineration of Spent Nuclear Fuel</i>
17.00	<b>A.V.Anikeev</b>	<i>Numerical Model of the Fusion-Fission Hybrid System Based on Gas Dynamic Trap for Transmutation of Radioactive Wastes</i>
17.20	<b>O.Agren</b>	<i>Fusion-fission Hybrid Reactor Studies for the Straight Field Line Mirror</i>
<b>18.00</b>		<b>Bus to conference dinner</b>

---

## Friday, July 9

<b>10.00 -11.10</b>		<b>Chairman: V.L.Vdovin</b>
10.00	<b>C.F.Driscoll</b>	<i>Overview of Transport, Damping, and Wave-Couplings from Separatrix Dissipation in an Axisymmetric Plasma</i>
10.35	<b>V.A.Kurnaev</b>	<i>Plasma Surface Interactions in Fusion Devices (Review of recent results presented at PSI conference in San Diego)</i>
<b>11.10--11.30</b>		<b>Coffee break</b>
<b>11.30 -12.45</b>		<b>Chairman: E.P.Kruglyakov</b>
11.30	<b>A.E.Shevelev</b>	<i>Gamma-Ray Spectrometry of Hot Plasmas</i>
11.50	<b>A.A.Panasenkov</b>	<i>Engineering-Physical Tokamak T-15MD and Steady State Injection</i>
12.10	<b>A.A.Ivanov</b>	<i>Perspectives of Development of Magnetic Mirror Traps in Novosibirsk</i>
<b>12.45--13.00</b>		<b>Conference closing</b>
<b>13.00--14.00</b>		<b>Lunch</b>
<b>14.00--16.00</b>		<b>Excursions to experimental facilities of Budker Institute</b>
<b>16.00--18.00</b>		<b>Optional excursions to Novosibirsk and Akademgorodok</b>

---

## Saturday, July 10

<b>8.00</b>	<b>Departure</b>
	<b>Bus to the Post-Conference Tour</b>