

Type	What
K	keynote
R	regular
B	break
S	space
M	misc

	Time	Interval	Title, Author/Chair	Type
Sunday, 1 November 2009: Palm Patio				
Registration	18:00	2:00		M
	20:00	0:00		M
Monday, 2 November 2009: Bouchon				
Session 1. Plenary	8:00	0:00	Claude Phipps	S
	8:00	0:20	<i>Opening Remarks</i> Claude Phipps	M
Keynote 1	8:20	0:40	<i>High power laser propulsion</i> Yuri Rezunkov	K
Keynote 2	9:00	0:40	<i>Airbreathing Pulsed Laser Propulsion Experiments with Terawatt Pharos III 1 μm Laser</i> Leik Myrabo	K
Break	9:40	0:20	---	B
Keynote 3	10:00	0:40	<i>Power Beamed Photon Sails: New Capabilities Resulting from Recent Maturation of Key Solar Sail and High Power Laser Technologies</i> Sandy Montgomery	K
Session 2. Lightcraft I	10:40	0:00	Leik Myrabo	S
	10:40	0:05	<i>Intro Remarks</i> Leik Myrabo	M
	10:45	0:25	<i>Australian Airbreathing Propulsion Research for Hypersonic, Beamed Energy-Propelled Vehicles</i> David Froning	R
	11:10	0:25	<i>Investigation on altitude characteristics for air breathing laser propulsion</i> Yanji Hong	R
	11:35	0:25	<i>Energy law of similitude for laser propulsion powered by single laser pulse</i> Yanji Hong	R

Lunch	12:00	1:30		M
Session 2, Concluded	13:30	0:00	Leik Myrabo	
	13:30	0:25	<i>Experimental Investigation into Beam-Riding Physics of Lightcraft Engines</i> David Kenoyer	R
	13:55	0:25	<i>Subsonic Aerodynamics of Spinning and Non-Spinning Type 200 Lightcraft</i> David Kenoyer	R
	14:20	0:25	<i>Inlet Aerodynamics and Ram Drag of Laser-Propelled Lightcraft Vehicles</i> Tobias Langener	R
	14:45	0:25	<i>Analysis of the Laser Launch and Beam Module Concept</i> Manolo Pires	R
	15:10	0:25	<i>Experimental analysis of a 2-D lightcraft in hypersonic flow</i> Israel Salvador	R
	15:35	0:25	<i>High speed analysis of free flights with a parabolic thruster</i> Stefan Scharring	R
	16:00	0:25	<i>Remotely controlled steering gear for a laser-driven rocket with a parabolic thruster</i> Stefan Scharring	R
End	16:25			
Program Cmte Meeting	17:15	1:00	Executive Board Room (PC members only)	
Dinner on your own	18:00			
Tuesday, 3 November 2009: Bouchon				
Session 3. Lightcraft II	8:00	0:00	David Froning	M
	8:00	0:05	<i>Intro Remarks</i> David Froning	M
	8:05	0:25	<i>Excimer Laser Annealing of Silicate Glass with Ion-Synthesized Silver Nanoparticles</i> Andrey Stepanov	R
	8:30	0:25	<i>Solar power satellites: Creating the market for beamed energy propulsion</i> Jonathan Coopersmith	R

	8:55	0:25	<i>Numerical study on the thermal-mechanical shock failure mechanism for annular-focusing laser thrusters</i> Zhiping Tang	R
Break	9:20	0:20		B
Session 4. Simulations and Measurement Techniques	9:40	0:00	Eric Davis	M
	9:40	0:05	<i>Intro Remarks</i> Eric Davis	M
	9:45	0:25	<i>Measurement issues in pulsed laser propulsion</i> John Sinko	R
	10:10	0:25	<i>Energy Absorption Structure of Laser Supported Detonation Wave</i> Bin Wang	R
	10:35	0:25	<i>Computational Model of Collisional-Radiative Nonequilibrium Plasma in a Gas-Driven Type Laser Propulsion</i> Yousuke Ogino	R
AIBEP update	11:00	0:10	Claude Phipps	M
Arthur Kantrowitz Memorial	11:10	0:20	Keith Henson	M
Lunch	11:30	2:00		M
Session 5. Laser Ablation Propulsion I	13:30	0:00	Claude Phipps	M
	13:30	0:05	<i>Intro Remarks</i> Claude Phipps	M
	13:35	0:25	<i>Usage of polyacetal powders as laser ablation propulsion propellant</i> Akihiro Sasoh	R
	14:00	0:25	<i>Thrust Generation with Low-Power Continuous-Wave Laser and Aluminum Foil Interaction</i> Hideyuki Horisawa	R
	14:25	0:25	<i>Experimental study of polymeric propellants seeded with metallic powder for laser propulsion</i> Long Li	R

	14:50	0:25	<i>Experimental Study of Laser Micro-Propulsion for Different Thickness of Propellant</i> Cai Jian	R
	15:15	0:25	<i>A model for laser ablation mass removal and impulse generation</i> John Sinko	R
Break	15:40	0:20		B
Session 6. Laser Ablation Propulsion II	16:00	0:00	Hans-Albert Eckel	M
	16:00	0:05	<i>Intro Remarks</i> Hans-Albert Eckel	M
	16:05	0:25	<i>CO2 laser ablation propulsion area scaling with polyoxymethylene propellant</i> John Sinko	R
	16:30	0:25	<i>Appropriate hardware for laser ablation propulsion for DM ram jet</i> Andrew Beckwith	R
	16:55	0:25	<i>Survey of CO2 laser ablation propulsion with polyoxymethylene propellant</i> John Sinko	R
	17:20	0:25	<i>Experimental Investigation of Liquid-propellant Laser Propulsion with a Horizontal Momentum Measuring Lever</i> Bin Wang	R
End	17:45	0:00		M
Dinner on your own	18:00	0:00		M
Wednesday, 4 November 2009: Bouchon				
Session 7. Advanced Concepts	8:00	0:00	Akihiro Sasoh	M
	8:00	0:05	<i>Intro Remarks</i>	M
	8:05	0:25	<i>Carbon Dioxide and Power Satellites: A Comprehensive Mitigation Proposal and Financial Analysis</i> Keith Henson	R
	8:30	0:25	<i>Photovoltaic Concentrator Based Power Beaming for a Space Elevator Application</i> Andrew Lyjak	R
	8:55	0:25	<i>CO2 laser ablation propulsion tractor-beams</i> John Sinko	R

	9:20	0:25	<i>A conceptual design of omni-directional receiving dual-beam laser engine</i> Zhiping Tang	R
Break	9:45	0:20		B
Session 8. Space-Based BEP Applications	10:05	0:00	Sandy Montgomery	M
	10:05	0:05	<i>Intro Remarks</i> Sandy Montgomery	M
	10:10	0:25	<i>Appropriate laser ablation propulsion for boosting a proposed DM ram jet to sufficient velocity to work in the SOLAR system as a start for an interstellar probe to reach operational velocity for a DM ram jet to work</i> Andrew Beckwith	R
	10:35	0:25	<i>Laser propulsion device for space vehicles</i> Yuri Rezunkov	R
	11:00	0:25	<i>Laser Propulsion Applications for Space Research</i> A. V. Rodin	R
	11:25	0:25	<i>Flight Experiments on Energy Scaling for In-Space Laser Propulsion</i> Stefan Scharring	R
	11:50	0:25	<i>High-I_{sp} Operation of Pulsed Laser-Electric Hybrid Accelerator for Space Propulsion Applications</i> Tadaki Shinohara	R
Lunch	12:15	2:00		M
Session 9. Laser and microwave BEP	14:15	0:00	Willy Bohn	M
	14:15	0:05	<i>Intro Remarks</i> Willy Bohn	M
	14:20	0:25	<i>Space Experiments to Advance Beamed Energy Propulsion</i> Donald Johansen	R
	14:45	0:25	<i>Computational study of microwave supported ionization front using PIC-DSMC method</i> Hitoshi Otani	R
	15:10	0:25	<i>Propagating structure of a microwave driven shockwave inside a microwave rocket</i> Yutaka Shimada	R

	15:35	0:25		<i>Preliminary Numerical Investigation on Microwave Beamed Energy Thruster</i> Guang-qing Shia	R
Break	16:00	0:20			B
Session 10. Simulations and Measurement Techniques II	16:20	0:00		Stefan Scharring	M
	16:20	0:05		<i>Intro Remarks</i> Stefan Scharring	M
	16:25	0:25		<i>Terminating Conditions of Laser Supported Detonation in Two Different Lasers</i> Toshikazu Yamaguchi	R
	16:50	0:25		<i>Visualization of Schock Wave Driven by Millimeter Wave Plasma in a Parabolic Thruster</i> Toshikazu Yamaguchi	R
	17:15	0:25		<i>Modeling CO₂ Laser Ablation of Polyoxymethylene</i> John Sinko	R
End	17:40	0:00			M
Dinner and Awards Ceremony	19:00	2:00		Claude Phipps	M
End	21:00			<i>Science versus Science Fiction</i> Mitat Birkan, AFOSR	
Thursday, 5 November 2009					
Grand Canyon Tour	07:15	20:00		<i>Grand Canyon Tour</i>	