Venue

The symposium will take place at the Schlosshotel Monrepos in the northern outskirts of Ludwigsburg, just north of Stuttgart. The Schlosshotel Monrepos is embedded in the picturesque parkland of the lakeside Monrepos Castle which dates back to the 18th century. Surrounded by a riding club, a golf course and most importantly the dreamlike Monrepos Lake with its fairytale baroque castle, this romantic hotel guarantees an active and at the same time romantic vacation in Germany. The 250 hectare large parkland offers a purely peaceful idvll, meanwhile the city centers of Ludwigsburg and Stuttgart are only a short car journey away.

World Wide Web

For the latest information on ISBEP 7, please visit our website.

www.isbep7.de

Conference Office

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DLR Site Lampoldshausen

Baroque Castle Ludwigsburg

Images: Schlosshotel Monrepos. Stuttgart Marketing GmbH, Stadt Ludwigsburg, DLR

DLR at a glance

DLR is Germany's national research center for aeronautics and space. Its extensive research and development work in Aeronautics. Space, Transportation and Energy is integrated into national and international cooperative ventures. As Germany's space agency, DLR has been given responsibility for the forward planning and the implementation of the German space program by the German federal government as well as for the international representation of German interests. Furthermore, Germany's largest projectmanagement agency is also part of DLR.

Approximately 6,500 people are employed at thirteen locations in Germany: Koeln (headquarters), Berlin, Bonn, Braunschweig, Bremen, Goettingen, Hamburg, Lampoldshausen, Neustrelitz, Oberpfaffenhofen, Stuttgart, Trauen and Weilheim. DLR also operates offices in Brussels, Paris, and Washington D.C.

DLR's mission comprises the exploration of the Earth and the Solar System, research for protecting the environment, for environmentally-compatible technologies, and for promoting mobility, communication, and security. DLR's research portfolio ranges from basic research to innovative applications and products of tomorrow. In that way DLR contributes the scientific and technical know-how that it has gained to enhancing Germany's industrial and technological reputation. DLR operates large-scale research facilities for DLR's own projects and as a service provider for its clients and partners. It also promotes the next generation of scientists, provides competent advisory services to government, and is a driving force in the local regions of its field centers olar testing facilities and laboratories in Cologne and Stuttgart.



Deutsches Zentrum für Luft- und Raumfahrt e.V. A Member of the Helmholtz Association

German Aerospace Center

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Director: PD Dr. Adolf Giesen



ISBEP7

SBEP

7th International Symposium on Beamed Energy Propulsion

April 10 - 14, 2011 Schlosshotel Monrepos Ludwigsburg, Germany





Conference Scope

Beamed Energy Propulsion (BEP) is a revolutionary technology for future space transportation. BEP vehicles are driven by power that can be beamed from a remote, reusable, and long-range source. While the majority of modern BEP techniques are based on lasers, the scope of ISBEP also covers other forms of directed energy, such as microwave and x-ray radiation. In combination with a multitude of propulsive mechanisms such as blast waves, ablation, photon pressure, vaporization, photodesorption, and alike, BEP stays on a forefront of modern physics and engineering.

BEP systems provide unique propulsive characteristics which would be impossible to achieve by means of traditional, combustionbased engines. Vehicles driven by BEP will be smaller, lighter, faster, and more efficient than any currently existing means of space transportation. In addition, BEP offers new and often unique technical solutions which are unattainable by traditional means of propulsion. Potential application areas of BEP are found in astronautics from space-borne micropropulsion via terrestrial launches and laser based debris removal to interstellar missions, but also in aeronautics and micronautics, i.e., motion in microspace.

The 7th International Symposium on Beamed Energy Propulsion (ISBEP 7) is committed to carry on the mission, started by ISBEP 1 in 2002 (Huntsville, Alabama) and continued by ISBEP 2 (Sendai, Japan, 2003), ISBEP 3 (Troy, New York, 2004), ISBEP 4 (Nara, Japan, 2005), ISBEP 5 (Kona, Hawaii, 2007), and ISBEP 6 (Scottsdale, Arizona, 2009).

It will bring together organizations and individuals interested in developing BEP vehicles, engines, schemes and concepts into space transportation systems of the future. It will offer an exceptional opportunity for researchers in the BEP field to present the current results of their studies.

Paper submission will be mandatory for oral presentation at the conference and vice versa. The call for papers including detailed instructions will be launched in October 2010.

Conference Topics

The program of ISBEP 7 will cover all aspects related to the science and technology of beamed-energy propulsion in its various forms and applications. Within these fields the submitted papers should concern one of the following topics:

- BEP energy source technology
- Research facilities and measurement techniques
- Fundamentals of laser ablation propulsion
- Dynamics of laser-supported detonation and combustion
- Thruster technology
- BEP systems and flight experiments
- Power beaming, propagation and imaging
- Beam guidance and tracking
- Space applications of BEP
- Aeronautic applications of BEP
- Economics, geography, politics, law and history of BEP
- Applications beyond aerospace propulsion, e.g., hypervelocity impacts, robotic transport, BEP nano-vehicles

Preliminary Program

April 10, Sunday Evening -April 11, Monday -April 11, Monday Evening -April 12, Tuesday -April 12, Tuesday Evening -April 13, Wednesday -April 14, Thursday - Excursion to DLR-Lampoldshausen and

Welcome Reception Conference Sessions Excursion to DLR-Stuttgart Conference Sessions (continued) Conference Dinner Conference Sessions (continued) April 13, Wednesday Evening - A Night at the Stuttgart Opera the famous Baroque Castle of Ludwigsburg





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Conference Dinner

Conference Session

Committee

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Important Dates

October 2010	Call for Papers and
	detailed Registration Information
ebruary 1, 2011	Abstract Submission
ebruary 1, 2011	Early Bird Registration
ebruary 4, 2011	Hotel Reservation
ebruary 15, 2011	Opera Ticket Reservation (optional)
April 6, 2011	Presentation Submission
April 11, 2011	Paper Submission
April 10 -14, 2011	ISBEP 7 Conference





DLR Site Stuttgart