

Programme:

Start: March 9, 2010, 10 am
 End: March 11, 2010, 12 am

The conference will include about 15 sessions with oral presentations, a poster session and demonstrations as well as a welcome party and a social event.

Target Groups:

Researchers, academics, software developers, system and service providers as well as users.

Language:

The official language will be English. Manuscripts and presentations should be written and presented in English.

Organisation:

Scientific Committee (to be completed):

- Prof. Dr. Hermann Auernhammer, TU München
- Prof. Dr. Sven Behnke, University of Bonn
- Prof. Dr. Alain Geiger, ION Switzerland
- Prof. Dr. Hilmar Ingensand, IGP, ETH Zürich
- Prof. Dr. Heiner Kuhlmann, University of Bonn
- Prof. Dr. Hansjörg Kutterer, University of Hannover
- Prof. Dr. Henning Meyer, TU Berlin
- Prof. Dr. Arno Ruckelshausen, FH Osnabrück
- Prof. Dr. Peter Schulze Lammers, University of Bonn
- PD Dr. Volker Schwieger, University of Stuttgart
- Dr. Werner Stempfhuber, IGP, ETH Zürich

Conference Directors:

- Prof. Dr. Heiner Kuhlmann
- Prof. Dr. Peter Schulze Lammers

Conference Administration:

Faculty of Agriculture, University of Bonn
 Meckenheimer Allee 174, D-53115 Bonn
 E-Mail: MCG@uni-bonn.de
www.mcg.uni-bonn.de
 Tel.: 0049/228/73-2620



Sponsored by:



Operational sequence:

March 9:

- 10:00 Opening
- 12:00 Lunch
- 14:00 Sessions
- 18:00 Welcome Party

Opening

Prof. Dr. Behnke develops humanoid robots participating in RoboCup Soccer, acting as museum guides and for mobile manipulations.

Welcome Party

Watch household robots perform their tasks while enjoying refreshments and stimulating talks.

March 10:

- 09:00 Sessions
- 12:30 Lunch
- 14:00 Sessions
- 16:00 Poster presentation
- 18:00 Social Event

Social Event

Guided tour through the exhibition at the Haus der Geschichte, afterwards dinner and drinks. Since opening in June 1994, the Haus der Geschichte displays contemporary German history from 1945 to the present day. You will find over 6,000 objects and documents ranging over 4,000 square meters of space across five exhibit levels.

March 11:

- 09:00 Sessions
- 12:00 End of Congress

**2nd International Conference
 on
 Machine Control & Guidance**

March 9 - 11, 2010

University of Bonn, Germany
 Faculty of Agriculture



www.mcg.uni-bonn.de

Programme:

The importance of 3D-position sensors for the navigation of machinery on construction sites of roads, tunnels, railways, and airports has increased over the last years and the market is still growing. Also in the field of agriculture GPS-based applications such as machine guidance, parallel tracking and yield mapping are well introduced.

After the 1st conference was successfully held in 2008 at ETH Zürich, researchers, academics, users, system and service providers are invited to participate in the 2nd International Conference on Machine Control & Guidance and thus to initiate a technical and scientific discussion, to interchange know-how, to bond synergies between the different applications and to boost research activities in this highly interesting field.

The following topics will be discussed:

Kinematic Measurement and Sensor Technology

- GNSS
- DGPS Services
- Tracking Total Stations
- Additional Sensors (Slope- and Orientation Sensors, INS, Gyro, ...)
- Calibration

Agriculture Applications (State of the Art, Trends)

- Precision Farming
- Yield Mapping
- Automatic Steering Systems
- Field Robotics
- Optical Sensors

Major Construction Projects

- Airports, Highways, Tunnels or Railways

Standardisation

- Interface / Protocol / Communication 3D-Sensor-Machine
- Rideability

Data Processing /Data Flow

- Acquisition
- Handling
- Geo-Referencing
- Verification / As-Built
- Quality Management

Control Process and Algorithm

- Filtering
- Real-Time Control
- Latency-System Reaction

3D-Construction Applications (State of the Art, Trends)

- Airports
- Tunnels
- Railways
- Highways
- New Road and Maintenance Jobs
- Control and Guidance Systems for Graders, Dozers, Pavers, Profilers, Excavators, Rollers
- Network Jobsite

Field and Soil

- field traffic and path planning
- mapping of field and crop features
- field and greenhouse robots
- autonomous systems
- soil sensing and mapping of soil characteristics

Call for Papers and Posters:

This call for paper is announced both for peer review papers and non peer review papers. Additionally submissions of posters is possible. In case of peer review paper deadline for submission of full paper is October 5, 2009; in case of non peer review papers and posters deadline of submission of a 300 words abstract is October 5, 2009. The scientific committee will review all submitted abstracts and decide of the form on presentation (oral or poster).

Deadlines:

Oct 5, 2009:	deadline for abstracts
Oct 5, 2009:	deadline for full paper with peer review
Nov 1, 2009:	notification of authors with abstracts
Dec 1, 2009:	notification of authors with peer review papers
Jan 10, 2010:	peer review papers and not peer review papers ready for print