Invitation

From
High Definition
Point Clouds
to 3D Virtual
Reality Models

54th Photogrammetric
Week

www.ifp.uni-stuttgart.de/phowo

Invitation

Topics of the Lecture Programme

From High Definition Point Clouds to 3D Virtual Reality Models

The Institute for Photogrammetry of the University of Stuttgart and the OpenPhoWo partners would like to give notice of the

**54th Photogrammetric Week in Stuttgart
from Monday, September 9 to Friday, September 13, 2013.**

This regular event was initiated by Carl Pulfrich as a "vacation course in photogrammetry" in 1909; since 1973 it has been held at the University of Stuttgart. Today, the Photogrammetric Week enjoys international recognition as an upgrading seminar and a platform for the exchange of experience.

Due to their close connection with photogrammetry, the aspects of geoinformatics have firmly established themselves among the topics of this event, which has been directed by **Professor Dieter Fritsch, Stuttgart**, since 1992.

The lectures by experts from Germany and abroad will be focused on the following topics:

- **Data Collection From Air, Space and Ground — An Update**
- **Advanced Methods of Computer Vision and Photogrammetry**
- **Solving the Future Mapping Problem, All About 3D Modelling**

The presentations will be in English. Sufficient time will be allocated for discussions.

The program will be supplemented with demonstrations and comments on practical examples in the afternoons. The fringe events will offer sufficient opportunity for personal contacts.

In addition, a tutorial on "**All About 3D Modelling — From 2.5D Meshes to 3D Virtual Reality Models**" will be held by the Institute for Photogrammetry (ifp) on Sunday, September 8, 2013.

Prof. Dr.-Ing. Dieter Fritsch
Institute for Photogrammetry
University of Stuttgart

Data Collection From Air, Space and Ground — An Update

- Digital Airborne Camera and LiDAR Systems
- The Future of Spaceborne Mapping (GMES, RADAR, etc.)
- Unconventional Airborne Mapping (UAVs, MiniVehicles)
- Mobile Mapping Systems
- Crowd-Sourced Image Data Collection

Advanced Methods of Computer Vision and Photogrammetry

- Direct Solutions for Camera Poses
- Structure and Motion (SaM) Algorithms
- Future of Bundle Block Adjustments
- High Resolution Image Matching (e.g. SGM, PMVS)
- Photogrammetry on the Chip – Towards Online Solutions

Solving the Future Mapping Problem, All About 3D Modelling

- Generic Descriptions of 3D Modelling
- All About Point Clouds: Meshing, Merging and Classification
- 3D CAD Modelling
- State-of-the-Art of 3D Virtual Reality Models (Cities, Landscapes)
- The Future of 3D Mapping, as seen by Apple, Google and Microsoft

General Information

Site of the seminar
Lectures and discussions will be held in the basement auditorium of building K2 of the University of Stuttgart, Keplerstrasse 17. Rooms for demonstrations are available in buildings K1 and K2.

Duration of the seminar
Beginning: Monday, September 9, 2013
End: Friday, September 13, 2013

Lectures and discussions
As in the past, the lectures and discussions will be held in the morning. The conference language will be English.

Demonstrations of instruments and systems
Demonstrations are scheduled for the afternoons. Working groups will be formed in accordance with the particular interests of each participant and the language spoken.

Fringe programme
A fringe programme will give all participants the opportunity for personal contacts and individual discussions.

Accommodation
Accommodation can directly be booked at Stuttgart Marketing GmbH by either
Fax +49 711 22 28 251
email: hotels@stuttgart-tourist.de

Registration and fees
Registration for the 54th Photogrammetric Week should be addressed to:
Institute for Photogrammetry (ifp)
University of Stuttgart
Geschwister-Scholl-Str. 24(D)
D-70174 Stuttgart
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email: martina.kroma@ifp.uni-stuttgart.de
www: http://www.ifp.uni-stuttgart.de

The participation fee is 450,00 Euro for registration and payment by **June 30, 2013** and 500,00 Euro after that date. For daily admission it is 200,00 Euro.
For participation in the tutorial there is a charge of 200,00 Euro.