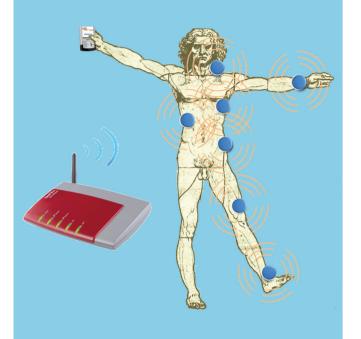
# **Smart Building and Smart Living** luxury or standard?



## tubs.CITY

tubs. CITY. the Center for Informatics and Information Technology at the Technical University of Braunschweig was founded by 28 faculty members of computer science, electrical engineering and coordinate their research activities.

The 3rd annual symposium of the tubs.CITY will highlight the opportunities and challenges when Smart Buildings and Smart Homes act in concert.

In the morning, which will be held in the innovative office environment of the future workspace (www.igs.bau.tu-bs. de/\_forschung/\_futureworkspace/frameset.htm at Mühlenpfordstraße, 9th floor), renowned experts will discuss Smart Buildings and their embedding in the energy grid, followed by an overview on new developments of IT platforms that enable an efficient combination of building management and home networks.

The afternoon will be organized in the House of Science (Haus der Wissenschaft, www.hausderwissenschaft.org) and cover Smart Home developments. This part of the symposium is jointly organized with BITZ, a TUBS Center that focuses on Informatics in medicine and biology. Again, renowned experts will give insights into the state of the art and current work.

#### Partner:

http://www.bitz.it



Symposium Organizers Rolf Dr.-Ing. Rolf Ernst tubs.CITY

Session Organizers tubs.CITY

For room reservation please contact us at city@tu-bs.de

### Registration

All participants, except for invited speakers, register at city@tu-bs.de

There is a small fee to cover the workshop expenses: 100€

Contact tubs.CITY Phone: (+49)531-391-8118 Email: city@tu-bs.de

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Technische Universität Braunschweig



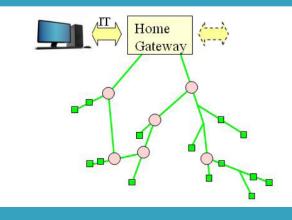
3rd tubs.CITY Symposium

June 23, 2011 Braunschweig http://city.tu-bs.de

# Smart Building meets Smart Home

While Information Technology (IT) is shaping our "knowledge society", important parts of our daily life have hardly been impacted. Except for infotainment and a few control units in appliances, our homes and buildings have hardly profited from IT development. Yet, societal challenges need progress in this area. Buildings which are still responsible for a large part of the overall energy consumption, could become more power efficient and could be used to balance the varying supply of renewable energy. Home environments could help improving life in an aging society, including health and care support. When coupled, both domains could greatly benefit from each other.

The societal impact of these developments depends on their broad introduction. This requires that technology moves from large office buildings and few high-cost homes to the low cost average household. Only then new services become economically viable and the effect on energy consumption and control will become visible.



There are many aspects of efficiency, cost, privacy, training, and maintenance, and the key controversial question who would pay for introduction and operation. The symposium will close with a panel (in German) that will discuss these issues. Because of the general interest, the panel will be open to the public.

#### Program

The symposium starts on Thursday morning and ends in the evening with a Panel Discussion and snacks.

#### Speakers

9:00 Opening at Future Workspace

Session 1: Smart Buildings and Energy og:15 Optimization of Buildings –Demand follows supply in electricity grids - why and how? Prof. Dr. Michael Sonnenschein, OFFIS Institute for Information Technology, Oldenburg

**09:45** Optimization of lokal Grids –Management and control of energy streams in Smart Grids **Prof. Dr. ir. Gerard Smit**, University of Twente, The Netherlands

 10:15 Smart Home – Concepts for an Integrated Energy Management
 Prof. Dr. H. Schmeck, Karlsruher Institut für Technologie

**10:45** Cost and Value of Locally Generated Photovoltaic Energy Potential of Consumption Control and Storage of Photovoltaic Energy

Dr.-Ing. Johannes Kneip, Centrosolar Group AG

11:15 Coffee break

#### Session 2: Smart Building Integration

11:45 Energy Efficient Campus – "Building as Power Plant – Smart Homes as integral part of the energy system"
Prof Dr.-Ing. M. Norbert Fisch, TU Braunschweig

12:15 The Smart Home Platform –Towards an Integrated Platform for Smart BuildingsProf. Dr.-Ing. Rolf Ernst, TU Braunschweig

12:45 Security of integrated networks – A Secure ManagementFramework for SCADA NetworksDr. Prevelakis, Aegis Research Center, Greece

#### 13:15 Lunch in the Mensa

14:15 Opening at House of Science (5. Floor)

#### Session 3: Smart Homes for Ambient Assisted Living

**14:30** Technologies for HealthCare and Assisted Living Prof. Dr.-Ing. Klaus Müller-Glaser, Karlsruher Institut für Technologie

15:00 Using Sensor Networks for Ambient Assisted Living Prof. Dr. Sàndor Fekete, TU Braunschweig

Future Workspace

15:30 On Health-enabling Technologies for Home-centered Health Care Prof. Dr. R. Haux, MH Hannover & TU Braunschweig

16:00 Assistance Systems at Home for Geriatric Patients Prof. Dr. Med. E.Steinhagen-Thiessen, Charité Berlin

16:30 Coffee break

**Pane** Smar

17:00 Discussion with following participants:
Dr.-Ing. Johannes Kneip, Centrosolar Group AG
Prof. Dr. med. Elisabeth Steinhagen-Thiessen, Charité Berlin
Prof. Dr.-Ing. M. Norbert Fisch, TU Braunschweig
Prof. Dr.-Ing. Rolf Ernst, TU Braunschweig
Delia Balzer, LINGA
Rüdiger Warnke, Nibelungen-Wohnbau GmbH
Dr. Mike Plischke, BITZ

**18:30** Reception and the End of the tubs.CITY Symposiums (1. Floor)

Link auf 2. Flyer

#### Panel Discussion:

Smart Building and Smart Living - luxury or standard?

