



**URBAN SYSTEMS
GLOBAL CHALLENGES
DIGITAL TOOLS**

**INTERNATIONAL
SYMPOSIUM
STUTT GART**

28-29 MAY

URBAN SYSTEMS GLOBAL CHALLENGES DIGITAL TOOLS

Large-scale digitalization throughout different sectors of society and the economy serves as one of the major disruptive technological trends of our time. In addition to the digital transformation, we must better understand and shape technology's role in our personal and working lives. Indeed, how these digital transformations impact cities and urban life is still not well-understood. Technological advancements have enabled ever-shorter innovation and production cycles, but these increasingly rapid cycles complicate long-established, slower-moving processes related to urban infrastructure and city planning.

In many cases, planning and decision-making processes are carried out by the use of conventional, strongly regulated procedures and tools that struggle to keep pace with complex problems currently facing society, stemming from high-speed change in economy and society. Digital tools and methods offer great potential for the efficient, needs-based, goal-oriented development and the planning of sustainable habitats by taking into account all relevant stakeholders.

During the two-day international symposium **URBAN SYSTEMS / GLOBAL CHALLENGES / DIGITAL TOOLS**, digital tools and formats, as well as their applications, will be presented in the symposium's morning sessions. During the afternoon workshops, enthusiasts have the possibility to try out these tools to help solve mock scenarios.

Venue:

High-Performance Computing Center Stuttgart (HLRS)
Nobelstraße 19
70569 Stuttgart, Germany

Participation is free of charge, registration is required (limited attendance):

<https://regi.hlrs.de/2019/UGD/registration/reginit>

Participants:

The symposium is aimed at the shapers and planners of the digital city of tomorrow as well as to the interested public:

- City administrations
- Architects, urban designers and planners
- Researchers
- Students
- Citizen participation managers
- Enterprises
- Communications agencies
- Interested citizens

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INTERNATIONAL
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28-29 MAY 2019
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VORTRÄGE UND WORKSHOPS AN DIESEM
TAG WERDEN AUF DEUTSCH GEHALTEN

LECTURES AND WORKSHOPS ON THIS DAY
WILL BE HELD IN GERMAN

- 09:00 **OPENING: SABINE KURTZ, VIZEPRÄSIDENTIN DES
LANDTAGS VON BADEN-WÜRTTEMBERG***
- 09:15 **STEFFEN BRAUN, FRAUNHOFER IAO: KEYNOTE
»URBAN FUTURES«**
- 10:00 **REALLABOR STADT:QUARTIERE 4.0
»DIGITALE TRANSFORMATION UND PARTIZIPATION IN
DER PLANUNG« PROJEKTERGEBNISSE UND AUSBLICK**
- 11:00 **MICHAEL RESCH, HLRS / BW-HPC:
BEGRÜSSUNGSREDE WELCOME SPEECH
»HPC, GLOBAL SYSTEM SCIENCE AND CHALLENGES«**
- 11:30 **KAFFEPAUSE
COFFEE BREAK**
- 11:45 **JULIAN PETRIN, URBANISTA
»CO-CREATING THE FUTURE CITY«**
- 12:15 **PETER ZEILE, KARLSRUHER INSTITUT FÜR TECHNOLOGIE (KIT)
»URBAN EMOTIONS«**
- 12:45 **TOBIAS SCHILLER, IBA 2027 STADTREGION STUTT GART
»STADT NEU DENKEN: DIE IBA'27 ALS INSTRUMENT
URBANER TRANSFORMATION«**
- 13:15 **MITTAGSPAUSE
LUNCH BREAK**
- 14:15 **WORKSHOP 1:
»DIE DIGITALE ZUKUNFT PLANEN«
REALLABOR STADT:QUARTIERE 4.0**
- 14:15 **WORKSHOP 2:
»DIGITALER ZWILLING, FALLSTUDIE: HERRENBERG.
VERKEHRSSIMULATION IN ECHTZEIT IN VR UMGEBUNGEN«
THOMAS OBST UND UWE WÖSSNER (HLRS)**
- 17:30 **PIET SELLKE
»GOVERNANCE UND INSTITUTIONELLE ANPASSUNG:
WOHIN MIT DER BETEILIGUNG?«
ÖFFENTLICHER VORTRAG PUBLIC LECTURE**
- 18:30 **DINNER / SOCIAL EVENT**

REALLABOR
STADT:QUARTIERE4.0

Frühzeitige gestaltende Bürgerbeteiligung
für eine nachhaltige Entwicklung
Baden-Württembergs

*REQUESTED

**LECTURES AND WORKSHOPS ON THIS DAY
WILL BE HELD IN ENGLISH**

VORTRÄGE UND WORKSHOPS AN DIESEM
TAG WEREN AUF ENGLISCH GEHALTEN

29 MAY

- 09:00 WELCOME**
BEGRÜSSUNG
- 09:15 CLAUDIA YAMU, UNIVERSITY OF GRONINGEN (RUG): KEYNOTE**
»DIGITAL METROPOLIS«
- 10:00 MICHAEL GIENGER, HLRS / HiDALGO**
»SYNTHETIC INFORMATION SYSTEMS –
OPPORTUNITIES AND OBSTACLES«
- 10:30 NIKOLA SANDER, FEDERAL INSTITUTE FOR
POPULATION RESEARCH »THE IMPACT OF INTERNAL
MIGRATION ON THE SPATIAL DISTRIBUTION OF
POPULATION ACROSS GERMANY«**
- 11:00 COFFEE BREAK**
KAFFEEPAUSE
- 11:15 ULRICH GOMMEL, EnBW ENERGIE BADEN-WÜRTTEMBERG AG**
»DIGITAL TRANSFORMATION IN PLANNING, PARTICIPATION
AND THE GERMAN ENERGIEWENDE«
- 11:45 GÜNTER WENZEL, FRAUNHOFER IAO**
»VISUALIZATION FOR DECISION MAKING IN CITIES«
- 12:15 ZOLTÁN HORVÁTH, UNIVERSITY OF GYŐR (SZE) / HiDALGO**
»URBAN AIR QUALITY MODELLING AND MANAGEMENT:
CASE STUDY GYŐR«
- 12:45 CLOSING WORDS AND INTRODUCTION TO THE WORKSHOP**
- 13:00 LUNCH BREAK**
MITTAGSPAUSE
- 14:15 WORKSHOP:
SPACE SYNTAX AND VIRTUAL REALITY**
CLAUDIA YAMU (RUG), FABIAN DEMBSKI, UWE WÖSSNER (HLRS)
- 18:00 FAREWELL**
VERABSCHIEDUNG

Within the scope of
Reallabor Stadt:Quartiere 4.0 and
bwHPC-S5, Centre of Excellence for
Global System Science:

Hosted by
Reallabor Stadt:Quartiere 4.0,
funded by:

In cooperation with
Städtetag
Baden-Württemberg



Baden-Württemberg

MINISTERIUM FÜR WISSENSCHAFT, FORSCHUNG UND KUNST



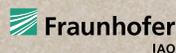
With participation of
HiDALGO
HPC and Big Data Technologies
for Global Challenges



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für eine nachhaltige Entwicklung
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N Nachhaltigkeitsstrategie
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