

# Dessau May 22-25, 2019



## 20th International Conference on Information Technologies in Landscape Architecture

### Program

Welcome to this years's DLA

## Wednesday, May 22

**Lyceum** Schwabestraße 3, Marmorsaal (Gebäude 01, Raum 114), 06846 Dessau

09.00 -10:00 DLA Registration - Please sign up for the workshops

10.00 -17.00 **Optional one day hands-on workshop**

#### Workshop on DIGITAL GEODESIGN SYNTHESIS

**State-of-the-art Geodesign case study on urban development**

*Prof. Dr. Carl Steinitz, CASA/UCL and Harvard University, United States*

*Dr. Michele Campagna, University di Cagliari, Italy et al*

see separate description for prerequisites

**Room 004** Gebäude 8, Bauhausstr. 05 · 06846 Dessau

10.00 -17.00 Begin of optional integrated five day **DLA Summer School Exploration in VISUAL IMPACT ASSESSMENT (3 credits ECTS)**

*Prof. Dr. James F. Palmer, T. J. Boyle Associates, Burlington, United States*

*Prof. Erich Buhmann, Anhalt University, Germany et al*

see separate description for prerequisites

**BAUHAUS AUDITORIUM and CANTEEN** Gropiusallee 38, 06846 Dessau

16.00 - 18.00 DLA Registration in the foyer of the Bauhaus Auditorium - Please sign up for the workshops

18.00 - 21.00

#### Public Lecture Bauhaus and Landscape Architecture

English/Deutsch - simultaneous translation

Anhalt University in cooperation with BDLA

**Public  
Keynote**

*Prof. Dr. Sonja Dümpelmann, Harvard University, United States*

**The Bauhaus Out-of-Doors: Landscape Architecture,  
the Avant-garde, and Its Legacy in 20th-Century Germany**

Moderation  
Music

*Dr. Jörg Rekittke, Leibniz University Hanover, Germany*

*Susanne Haase, Saxophone, Leipzig*

Welcome  
Addresses

*Dr. Werner Möller, Dessau Bauhaus Foundation, Germany*

*Prof. Dr. Jörg Bagdahn, President Anhalt University, Germany*

*Prof. Fritz Auweck, Chairman International Affairs BDLA and*

*IFLA Delegate BAK (Federal Chamber of German Architects)*

*Prof. Heinz W. Hallmann, Landschaftsarchitekt BDLA Aachen, Germany*

*Matthias Därr, Chamber of Architects, Saxony Anhalt, Germany*

19.00 - 19.30 Panel with above-named guests

**The Bauhaus and its Relevance in the Digital Age**

19.30 - 21.00 Reception with International Student Band of Anhalt University

Registration for 4 days or for single events or integrated DLA Summer School

and further information at [www.dla-conference.com](http://www.dla-conference.com)

contact [loel.dla@hs-anhalt.de](mailto:loel.dla@hs-anhalt.de)



**Hochschule Anhalt**  
Anhalt University of Applied Sciences

### Thursday, May 23

**BAUHAUS AUDITORIUM and CANTEEN** Gropiusallee 38, 06846 Dessau

- 08.00 - 09.00 DLA Registration in the foyer of the Bauhaus Aula - Please sign up for the workshops
- 09.00 - 09.15 Welcoming address by Prof. Dr. Elena Kashtanova, Dean, Department of Agriculture, Anhalt University
- 09.15 - 10.00 **Opening Keynote** *Prof. Kathryn Moore, Immediate Past President of the International Federation of Landscape Architects (IFLA) and Professor of Landscape Architecture at Birmingham City University, United Kingdom*  
**Landscape Architecture Practice in Europe**
- Moderation *Prof. Dr. Matthias Pietsch, Anhalt University, Germany*
- 10.00 - 10.30 Coffee Conference group picture taken in front of the Bauhaus
- 10.30 - 12.00 **Session 1** **Landscape: Informed by Science, Shaped by Design**
- Moderation *Dr. Stephen Ervin, Harvard University and Dr. Jörg Rekitke, Leibniz University, Hanover, Germany*  
**Landscape: Informed by Science, Shaped by Design - Introduction**  
*Prof. Aidan Ackerman, ESF Syracuse. N.Y., United States*  
**Computation and Visualization of Coastal Sea Level Rise Mitigation Strategies: Digital Applications of Scientific Data to Formulate Design Workflows for Climate Change**  
*Dr. Ata Tara, Royal Melbourne Institute of Technology, Australia*  
**Towards Managing Visual Impacts on Public Spaces: A Quantitative Approach to Studying Visual Complexity and Enclosure Using Visual Bowl and Fractal Dimension**  
*Dr. Joseph Claghorn, University of Sheffield, United Kingdom*  
**Algorithmic Design in Indeterminate Landscapes: a case study in an informal settlement in Medellin, Colombia**
- 12.00 - 13.00 Lunch
- Session 2** **Analog and Digital Landscape Architecture**
- 13.00 - 14.00 **Keynote** *Prof. Dr. Carl Steinitz, CASA/UCL and Harvard University, United States*  
**Landscape Architecture from Analog to Digital: A Personal Perspective**
- Moderation *Dr. Jörg Rekitke, Leibniz University Hanover, Germany*
- 14.00 - 15.30 **Parallel lecture** *Dr. Agnès Patuano, University of Edinburgh, United Kingdom*  
**Investigating Landscape Preference Using Fractal Geometry**  
*Dr. Madeline Brown, University of Florida United States*  
**ILAS: Intrinsic Landscape Assessment System for Landscape Design and Planning in the National Capital Region**  
*Marcel Bilurbina, Sergi Abellan, Marilena Christodoulou, AELAND, Spain*  
**Landscape Design Methodology: Pattern Formation Through the Use of Cellular Automata**  
*Tianyi Zhao, Southeast University, Nanjing, China*  
**Researching on the Tidal Flooding Through the Coastal Simulation: Developing Potential Managed Realignment Areas of Humber Estuary in England**
- 14.00 - 15.30 Parallel 1.5 hour workshop:  
**WS 2A: Lands Design: landscaping design tools for Rhino** – *Francesc Salla a. Anna Villafañe, Asuni, Barcelona, Spain*
- 15.30 - 16.00 Coffee **Please hand in your food preference for the Friday conference dinner**
- 16.00 - 17.30 **Parallel lecture** **Session 3: Presentations on the theme Geodesign**
- Moderation *Dr Michele Campagna, Università di Cagliari, Italy*  
*Dr. Jörg Rekitke, Leibniz University Hanover and Philip Paar, Laubwerk, Berlin, Germany*  
**Experience of a Genuine Geodesign Act**  
*Timothy Murtha, Luwei Wang, University of Florida, United States*  
**Historical Analysis of Land Use Change and Geodesign of Rapid Urbanization: Orlando, Florida, USA**  
*Prof. Brian Orland, University of Georgia, United States*  
**Improving our Global Infrastructure: The International Geodesign Collaboration**  
*Zihao Zhang, University of Virginia, United States (via Video and Internet)*  
**The Future of Artificial Intelligence (AI) and Machine Learning (ML) in Landscape Design: A Case Study in Coastal Virginia, US**
- 16.00 - 17.30 Parallel 1.5 hour workshop: **WS 3: Augmented Reality for Landscape Design** – *Prof. Dr. Matthias Pietsch, Daeyong Kim, Pool 2 in G.02 Mathias Feimer, Susanne Raabe, Anhalt University, Germany*
- 19.00 - 20.00 **Public Keynote** *Prof. Dr. Mike Batty, CASA, The Bartlett, University College London, United Kingdom*  
**Networks in Design: Resolving Conflicts and Reaching for Optimality in City Planning**
- Moderation *Sairah Badar, Anhalt University, Germany*
- 20.00 Reception in Bauhaus canteen with World Melange from Bernburg

# Dessau May 22-25, 2019



## 20th International Conference on Information Technologies in Landscape Architecture

### Friday, May 24 Focus: BIM IN LANDSCAPE ARCHITECTURE

Audimax and Room 005 Gebäude 8, Bauhausstr. 05 · 06846 Dessau

- 09.00 - 10.00 **Keynote** *Prof. Sarah Williams, MIT School of Architecture and Planning, United States*  
**Data|Action: Build It! Hack it! Share It** | English/Deutsch - simultaneous translation  
Moderation *Prof. Dr. Rudolf Lückmann, Vice President Anhalt University, Germany*
- 10.00 - 10.30 Coffee break Expo, Poster Exhibition
- 10.30 - 12.00 **Parallel lecture**  
**Session 4 BIM for Landscape – State of the Art** | English/Deutsch - simultaneous translation  
Moderation *Prof. Dr. Andreas Thon, Hochschule Geisenheim University, Germany*  
Audimax *Aleander Peters, Hochschule Geisenheim University, Germany*  
**Best Practises and First Steps of Implementing BIM** in Landscape Architecture and its Reflection of Necessary Workflows and Working Processes  
*Matthias Funk, Scape, Germany*  
**How to BIM - Workflows in Landscape Architecture**  
*Dr. rer. nat. Johannes Gnädinger, PSU Munich, Germany*  
**The BIM Lifecycle in Environmental and Landscape Planning**
- 10.30 - 12.00 **Parallel lecture**  
**Session 5 Smart Cities and Smart Regions**  
Moderation *Prof. Brian Orland, University of Georgia, United States*  
Room 005 *Dr. David L. Tulloch, Rutgers University, United States*  
**Geohealth Meets Geodesign: The Multidisciplinary Challenges of Informing the Regional Design Studio with Human Health Research**  
*Günter Gruber, RSA iSPACE Salzburg, Austria*  
**Indicator-based Landscape Assessment Matrix for Defining Land Use Priority Zones in the Salzburg FUA**  
*Thomas Machl, Technische Univerität München TUM, Germany*  
**Planning Agricultural Core Road Networks based on a Digital Twin of the Cultivated Landscape**  
*Dr. Siqing Chen, The University of Melbourne, Australia*  
**Spatial Aggregation and Renewable Energy Landscape Planning: A Case Study in Victoria**
- 12.00 - 13.00 Lunch, Expo

#### Dessau Campus Map



- Building 1: Marmorsaal Room 114
- Building 2: Pool 2
- Building 7: Pool 1
- Building 8: Audimax, Room 4, 5
- Building 10: Room E-46 (DIB)
- Bauhaus: Auditorium, Mensa

Source: Anhalt University

# Friday, May 24 (cont.)

- 13:00 - 14.30 **Parallel lecture**  
Session 4 (cont.) **BIM for Landscape – Future Development** | English/Deutsch - simultaneous translation  
Moderation *Prof. Dr. Stephen Ervin, Harvard University, United States*  
Audimax *Mike Shilton, Landscape Institute, United Kingdom*  
**Digital Transformation in Landscape Design using BIM Processes**  
*Dr. Andreas Carstens, Esri*  
**BIM & GIS - new dimensions of improved collaboration for infrastructure and environment**  
*Eric Gilbey PLA ASLA, Vectorworks*  
**Using Landscape BIM to Meet Site Design Requirements**
- 13:00 - 14.30 **Parallel lecture**  
**Session 6** **Point Cloud Applications in Landscape Architecture**  
Moderation *Prof. Pia Fricker, Aalto University, Finland*  
Room 005 *Dr. Ulrike Wissen Hayek, ETH Zurich, Switzerland*  
**Preparing 3D Point Clouds as Stimuli for Landscape Preference Studies: Lessons Learned**  
*Jozef Sedláček, Radim Klepárník, Mendel University, Czech Republic*  
**Testing Dense Point Clouds from UAV Surveys for Landscape Visualizations**  
*Drew Hill, Utah State University, United States*  
**How Virtual Reality Impacts the Landscape Architecture Design Process during the Phases of Analysis and Concept Development at the Master Planning Scale**  
*Verena Vogler, Bauhaus University Weimar, Germany*  
**High-Resolution Underwater 3D Monitoring Methods to Reconstruct Artificial Coral Reefs in the Bali Sea: A Case Study of an Artificial Reef Prototype in Gili Trawangan**
- 13:00 - 14.30 **Hands-on Workshops (parallel)**  
DIB Room E-46 WS 4A: **Workshop Landscape Architecture and BIM** – *Dr. Ilona Brückner Hochschule Osnabrück (German)*  
WS 5A: **BIM – Workshop with Vectorworks** – *Achim Hoffman-Brüning COMBRIO*  
Pool 1 - Geb 7 WS 6: **Digital Workflows for 3D planning in landscape architecture** – *Esri*
- 14.30 - 15.00 Coffee Break, Expo – **Please hand in your vote on the posters**
- 15.00 - 16.30 **Parallel lecture**  
**Session 7** **Algorithmic Landscapes**  
Moderation *Dr. Ulrike Wissen Hayek, ETH Zurich, Switzerland*  
Room 005 *Ilmar Hurkkens, ETH Zurich, Switzerland*  
**Computational Terrain Modeling with Distance Functions for Large Scale Landscape Design**  
*S. Elif Serdar, Istanbul Technical University, Turkey*  
**Generative Landscape Modeling in Urban Open Space Design: An Experimental Approach**  
*Prof. Pia Fricker, Aalto University, Finland*  
**Structuralism: Patterns of Interaction Computational Design Thinking across Scales**  
*Philipp R.W. Urech, Swiss Federal Institute of Technology, Switzerland*  
**Point-Cloud Modeling: Exploring a Site-Specific Approach for Landscape Design**
- 15.00 - 16.30 **Hands-on Workshops (parallel)**  
DIB Room E-46 WS 4B: **Workshop Landscape Architecture and BIM** – *Dr. Ilona Brückner, Hochschule Osnabrück (English)*  
Room 004 **WS 5B: BIM – Workshop with Vectorworks** – *Achim Hoffman-Brüning COMBRIO, Germany*
- 16.30 - 17.00 Final Panel Discussion on  
**Future of BIM in Landscape Architecture**
- 17.00 - 18.30 Guided Bauhaus Tour with Jeanne Colgan
- 19:30 - 22.30 Conference Dinner at Kornhaus Dessau: DLA Awards, Bernburg Jazz Ensemble JAZZONANZ

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Please see our vendors at the Expo, Foyer Gebäude 8

Anhalt University with Master of Landscape Architecture MLA and Online-Master Geoinformationssysteme (beMasterGIS), Asuni, BDLA, Esri Deutschland, Landscape Institute, Laubwerk, Vectorworks, VirtualcitySYSTEMS a.o.

# Dessau May 22-25, 2019

## 20th International Conference on Information Technologies in Landscape Architecture

### Saturday, May 25

**Audimax, Room 005** Gebäude 8, Bauhausstr. 05 · 06846 Dessau

- 09.00 - 09.40 **Keynote** *Prof. Dr. Mintai Kim, Virginia Tech, United States*  
**Geodesign: Common Language of Design and Planning Teaching and Research**  
 Moderation *Ruben Joye, University College Ghent, Belgium*
- 09:40 – (... 10.00) **3-minute presentations - Presentation of winning posters**
- 10.00 - 10.30 Coffee
- 10.30 - 12.00 **Parallel lectures**  
**Session 8: Augmented Reality (AR), Virtual Reality (VR) and Immersive Displays in Landscape Design**  
 Moderation *Prof. Hope H. Hasbrouck, The University of Texas at Austin, United States*  
 Audimax *Prof. Dr. James F. Palmer, T. J. Boyle Associates, Burlington, United States*  
**The Best Paper Format and Viewing Distance to Represent the Scope and Scale of Visual Impacts**  
*Ana Moural, Norwegian University of Life Sciences, Aas, Norway*  
**User Experience in Mobile Virtual Reality: An On-site Experience**  
*Dr. Adam Tomkins, The University of Sheffield, United Kingdom*  
**Tracking Visual Engagement in Mixed Reality: A Framework for analyzing interaction with Digital Models**  
*Seungmin Noh, Seoul National University, South Korea*  
**How Useful are Virtual Reality Simulations to the Field of Crime Prevention Through Environmental Design? - A Case Study**
- 10.30 - 12.00 **Parallel lectures**  
**Session 9: Teaching Digital Landscape Architecture**  
 Moderation *Prof. Dr. Elke Mertens, Hochschule Neubrandenburg, Germany*  
 Room 005 *Prof. Dr. Ulrich Kias, Weihenstephan-Triesdorf University, Germany*  
**"Open Street Map" as a Problem Based Learning Project: Opportunities to Use and Contribute to the Free Map of the World**  
*Prof. Dr. Benjamin H. George, Utah State University, United States*  
**Teaching and Learning Software in Landscape Architecture: A Survey of Software Use Amongst Faculty and Students**  
*Prof. Dr. Matthias Pietsch, Anhalt University, Germany*  
**Analyzing Ecosystem Services in Armenia Using ArcGIS Online: A Case Study of the Geghard Monastery and the Kotayk Province**
- 14.00 - 15.30 Parallel 1.5 hour workshop:  
 Room 004 **WS 2B: Lands Design: landscaping design tools for Rhino** - *Francesc Salla a. Anna Villafañe, Asuni, Barcelona, Spain*
- 12.00 - 12.30 Coffee, Snacks
- 12.30 - 13.30 **Session 8 Augmented Reality (AR), Virtual Reality (VR) and Immersive Displays in Landscape Design (cont.)**  
 Moderation *Prof. Dr. James F. Palmer, T. J. Boyle Associates, Burlington, United States*  
 Audimax *Ruben Joye, University College-Ghent, Belgium*  
**Exploring the World of Children and Teenagers in a 360° Virtual Environment**  
*Medria Shekar Rani, University of Sheffield, United Kingdom*  
**An Interactive Landscape Planning Process for Sustaining Flood Regulation in the Ci Kapundung Upper Water Catchment Area, Bandung Basin, Indonesia**
- 13.30 **Closing Panel – Dr. Stephen Ervin: Introducing DLA 2020 at GSD, Harvard, United States June 1-3, 2020**
- 14.00 Option 1/2 Day **Wörlitz Garden and Bauhaus Dessau with Uwe Merz,**  
 Bicycle Excursion **Landscape Architect Dessau and Jeanne Colgan**
- 14.00 - 17.00 Room 004 **Option DLA Summer School VIA (cont.)**
- 20:00 **Evening Meeting at Tobi or not ToBe / Heilmann-Restaurant, Dessau**

