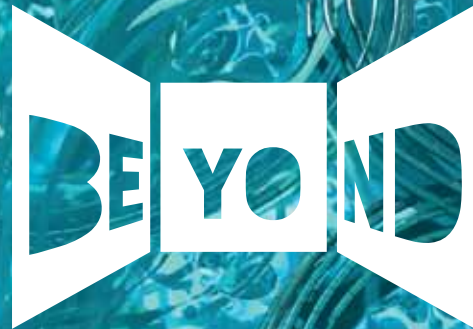


**PROGRAM**

**28 SEPT – 02 OCT 2016**



**3D-FESTIVAL 2016**  
FUTURE DESIGN THINKING



Panel Discussion 'Design the Future' BEYOND 2014

# 3D-Festival

28 SEPT – 02 OCT 2016

Karlsruhe

The city of Karlsruhe, together with the ZKM | Center for Art and Media, the HfG | University of Arts and Design and the University of Music, will be hosting the international 3D-Festival BEYOND from September 28 to October 02.

This year's festival will be held under the title FUTURE DESIGN THINKING and links science, technology and art within a symposium and an art exhibition.

Further information on all events:  
[www.beyond-festival.com](http://www.beyond-festival.com)



This year, the 3D-Festival BEYOND takes place for the sixth time at the ZKM | Center for Art and Media and the University of Arts and Design, Karlsruhe. Since 2011, BEYOND represents a creative network consisting of science, technology and art as well as an experimental laboratory for new art forms. Hereby, the festival focuses on social impacts caused by technology. By means of a symposium, experts of several disciplines are willing to jointly develop ideas for the future according to this year's motto "Future Design Thinking".

BEYOND perfectly fits to Karlsruhe - a city, which is innovative and future-oriented, focusing on science and research, but also on art and media. Around 30.000 employees and 4.200 companies in the sector of information and communication technology make Karlsruhe to one of the leading IT-locations in Germany. The Karlsruhe Institute of Technology with its 25.000 students is rated one of the most important research institutions in the field of technology worldwide. "Perfekt Futur", the center for creative founders, represents an essential contact point for the creative industries. Furthermore, the ZKM | Center for Art and Media with its Media Museum, the Museum of Contemporary Art as well as its research institutes and archives is known and renowned far beyond Karlsruhe. At the same time, Karlsruhe is a residence of law, caring for fundamental and human rights. With great conviction, our liberally inspired urban society is committed to the struggle against racism and xenophobia as well as all forms of discrimination.

Concluding, Karlsruhe can be seen as the right location for the 3D-Festival BEYOND. As the artistic director Ludger Pfanzer says, there is no better place where "scientists and artists have the possibility to stand up for their values and openly discuss potentials and risks in order to formulate a vision for Europe and BEYOND."

I sincerely wish greatest success to all participants in developing their visions and representing their values at BEYOND 2016.

**Dr. Frank Mentrup**  
First Mayor (OB) of Karlsruhe



Panel Discussion 'Designing for Abundance' BEYOND 2014



In a difficult time where patriarchal monodimensional thinking is making violently its last stand, we are celebrating not only the “next big thing” but Future Design Thinking. We are celebrating effectivity, opportunity, complexity, diversity, abundance, freedom, beauty, emergence and evolvability.

We are celebrating desirable improbabilities.  
We are celebrating technology which promotes emancipation.  
We are celebrating a technology which will be not antagonistic to nature anymore.

Welcome to BEYOND

**Prof. Ludger Pfanz**  
Head of 3D-Festival BEYOND

### **Preface BEYOND**

For hundreds of years our media – from book to film – have been limited to a two-dimensional surface. Texts or musical notations were written on paper, photographs were printed on paper and paintings were applied on canvas. Today we can observe two opposite tendencies: Space-based art forms like sculpture turn into actions with the participation of the public just like painting turned into action painting. This is what we call the performative turn. Time-based art forms like dance and music turn into sculptures and installation art. This is what we call the installative turn.

In a major leap forward and quite as an evolutionary step the conquest of the three-dimensional space has just begun. Art in alliance with new technologies and the sciences creates new



media that lead to explore 3D-movies, projection-mapping and the transformation of sounds, images and texts into data and vice versa. Space is the new frontier of the arts not only as a frame of reception but above all as a condition of production. Space-based production and reception of data instead of materials are the roads that we are building and that we have to follow.

**Prof. Peter Weibel**  
Chairman and CEO ZKM | Center for Art and Media Karlsruhe





Music seems to be some kind of 'virtual reality' a priori. What will happen if we fold music into a 'second-order-virtuality'? Are there unknown, unheard, still unexperienced artistic possibilities to compose? – Teachers and students at the Institute for Music Informatics and Musicology IMWI are going to expand their artistic and cognitive research in this promising field, using the excellent facilities of the HfM's "ComputerStudio" in our

new buildings. Several dissertations and master thesis's are on the road already and surely we will get exciting artistic and scientific results together with our partners.

**Prof. Dr. Thomas A. Troge**

Director of the "ComputerStudio" at the University of Music, Karlsruhe



Keiichi Matsuda 'Hyper-Reality'

WEDNESDAY September 28, 2016

**7 p.m. University of Music (HfM)**

Opening Ceremony

THURSDAY September 29, 2016

**9 a.m. ZKM\_Media Theater**

Opening Address by Christiane Riedel

**p. 29 9.15 a.m. ZKM\_Media Theater**

Future Design - Artistic Visions for Europe and BEYOND  
Prof. Ludger Pfan

**p. 22 9.50 a.m. ZKM\_Media Theater**

All-Too-Human Envisioning of Artificial Intelligences  
Ondřej Čákl

**p. 23 10.25 a.m. ZKM\_Media Theater**

Art and Technology through the Prism of Device\_art  
Ena Hodžić

**p. 23 11 a.m. ZKM\_Media Theater**

Napon - Algorithmic Futures  
Sunčica Pasuljević Kandić

**p. 24 11.35 a.m. ZKM\_Media Theater**

Immersed in Digital Space  
Tanja Bastamow

**p. 24 12.10 p.m. ZKM\_Media Theater**

Ninel Çam

**12.45 p.m. Lunch Break**

**1.45 p.m. ZKM\_Media Theater**

Panel Discussion

**p. 25 2.20 p.m. ZKM\_Media Theater**

Wearable Installation and Human Interaction - "Generative Membrane"  
Galina Mihaleva

**p. 25 2.55 p.m. ZKM\_Media Theater**

Beyond Drawing  
Frederic Fol Leymarie

**3.30 p.m. Break**

**p. 26 4 p.m. ZKM\_Media Theater**

Media (Wall) Nexus  
Ina Conradi

**p. 26 4.35 p.m. ZKM\_Media Theater**

Generative Art and Computational Creativity  
Philippe Pasquier

**p. 27 5.10 p.m. ZKM\_Media Theater**

Design and Production using Behavior-based Robotics  
Robert Stuart-Smith

**p. 27 5.45 p.m. ZKM\_Media Theater**

Embracing Uncertainty  
Kibwe Tavares

**p. 17 7 p.m. University of Arts and Design (HfG)**

Vernissage  
With Centre Culturel Franco-Allemand

**FUTURE DESIGN**

**FUTURE DESIGN**

FRIDAY September 30, 2016

- 10 a.m. ZKM\_Media Theater**  
Opening Address by  
Kathleen Schröter
- p. 28 10.15 a.m. ZKM\_Media Theater**  
Generation of High Quality Video  
Content and Virtualization of Human  
Bodies for VR  
Dr. Ralf Schäfer
- p. 28 10.50 a.m. ZKM\_Media Theater**  
Sönke Kirchhof
- p. 29 11.25 a.m. ZKM\_Media Theater**  
Aljoša Smolic
- 12 p.m. Lunch Break**
- p. 29 1 p.m. ZKM\_Media Theater**  
The Holodeck in the Making – Between  
Sensorama and Cornflakes  
Dr. Elke E. Reinhuber
- p. 30 1.35 p.m. ZKM\_Media Theater**  
VR Project “The Day After”  
Lauren Moffatt
- p.30 2.10 p.m. ZKM\_Media Theater**  
DATA: Design, Art, Technology and  
the Anthropocene  
Vibeke Sorensen
- 2.45 p.m. Break**
- p. 31 3.30 p.m. ZKM\_Media Theater**  
Trotzkind  
Sven Haeberlein
- p. 31 4.05 p.m. ZKM\_Media Theater**  
The Transparent Avatar in Your Brain  
Prof. Dr. Thomas Metzinger
- 5.15 p.m. ZKM\_Media Theater**  
Panel Discussion

# VIRTUAL REALITY

SATURDAY October 01, 2016

- p. 32 10 a.m. ZKM\_Media Theater**  
Animated Knowledge Aggregations -  
Old and New Silk Roads as a Showcase  
Dr. Andrea Nanetti
- p. 32 10.35 a.m. ZKM\_Media Theater**  
VR in China - A Competition of Speed  
Yulu Wang
- p. 33 11.10 a.m. ZKM\_Media Theater**  
Behind VR - The Relation, Trend and  
Practice on Image, Game and Storytelling  
Charles Wang
- p. 33 11.45 p.m. ZKM\_Media Theater**  
Thorsten Bauer
- 12.15 p.m. Lunch Break**
- p. 34 1.30 p.m. ZKM\_Media Theater**  
Eco-friendly Fabrication of Organic  
Solar Cells  
Alexander Colsmann
- p. 34 2.05 p.m. ZKM\_Media Theater**  
Beyond Meat and other  
Unsustainable Food  
Prof. Dr. Mark Post
- p. 35 2.40 p.m. ZKM\_Media Theater**  
Mind the Gap  
Christoph Backes
- 3.15 p.m. Break**
- p. 35 3.45 p.m. ZKM\_Media Theater**  
Designing the Future - Living Systems  
and the Ecology of Stories  
Keith Cunningham
- 4.45 p.m. ZKM\_Media Theater**  
Panel Discussion

# FUTURE DESIGN THINKING

SATURDAY October 01, 2016

**5.30 p.m. ZKM\_Media Theater**

The Future Design Manifesto

Prof. Ludger Pfanz

**p. 18 7 p.m. ZKM\_Foyer**

BEYOND Evening Event

Champagne Reception

Performance "The Dreams our Things are

Made of" by Vesna Petresin

Welcome Speeches

Aftershow Party with Music by KNSTK

SUNDAY October 02, 2016

**p. 17 10 a.m. University of**

**Arts and Design (HfG)**

Art Exhibition

**FUTURE DESIGN THINKING**

**OUT OF CONTROL**





## 3D ART

BEYOND sees itself as initiator of new art forms and the interaction of various media. Visitors of this year's BEYOND art exhibition will be confronted with recent and controversial topics represented by installations of numerous artists. The work "Global-is(ol)-ation" (by Gülsen Özkan) addresses the exertions of refugees escaping a home destroyed by war. Through a hole, viewers will gain insights into a container in which projections of different people fleeing into the unknown are shown. The project "Time machine" (by Marco Sanna) presents current developments in the field of multimedia. In an advertising pillar that serves as a presenter of media, a time machine is hidden, which, by means of high technology, takes the viewer on a journey through the past – to the big bang as the origin of life. Likewise, Arent Weevers operates with current developments in the multimedia sector, which are demonstrated by his stereoscopic and holographic works „Embrace Me“ and „Ecce Homo“. Additionally, organized by Vesna Petresin, the exhibition "Out of Control"

will show artworks by numerous renowned international artists. Visitors can look forward to pieces of art by Sean Snyder, Philippe Pasquier, Thecla Schiphorst, Matt Gingold, Keiichi Matsuda, Kibwe Tavares, Daniel Berio, Frederic Fol Leymarie, Rob Stuart-Smith, Memo Akten and the Cosmokinetic Cabinet Noordung.

**September 29, 2016 – October 02, 2016**

**University of Arts and Design  
Lorenzstraße 15  
76135 Karlsruhe**

**Friday – Sunday // 10 a.m. – 6 p.m.**

**Vernissage: September 29 // 6.30 p.m.**



University of Music, Karlsruhe

**Opening Ceremony: 3D-Festival BEYOND**  
**Wednesday September 28, 2016**  
**7 p.m. – Opening Reception**  
**7.30 p.m. – Welcome Speeches**  
**From 8 p.m. – Get-Together**  
**University of Music, Karlsruhe**

## BEYOND OPENING CEREMONY

To start off this year's 3D-Festival BEYOND, we invite you to join us for a nice Get-Together in the rooms of the University of Music, Karlsruhe. The evening will begin with an opening reception and welcome speeches by Ludger Pfanz and Thomas A. Troge. Pieces of music made by students of the University of Music will accompany the whole event, while snacks and drinks create a casual atmosphere with the participants of the 3D-Festival BEYOND.

**Evening Event: 3D-Festival BEYOND**  
**Saturday October 01, 2016**  
**7 p.m. – Champagne Reception**  
**7.30 p.m. - Performance "The Dreams our  
Things are Made of" by Vesna Petresin**  
**8 p.m. – Welcome Speeches**  
**From 9 p.m. – Aftershow Party with Music by KNSTK**  
**ZKM\_Foyer**

## BEYOND EVENING EVENT

Concluding this year's 3D-Festival BEYOND, the Evening Event will start with a champagne reception, a performance by Vesna Petresin and an opening address by the head of BEYOND Ludger Pfanz. Afterwards, it will be time for a nice Get-Together, having little chats while enjoying snacks and drinks. Dj KNSTK (steady-work) will ensure pleasant background music.



BEYOND Evening Event



Panel Discussion '3D Education International' BEYOND 2012

# BEYOND SYMPOSIUM

## Future Design Thinking

Deep technological trends - like interacting, cognifying, flowing, screening, accessing, sharing, filtering, remixing and tracking - overlap and strengthen one another. These larger forces will completely revolutionize the way we work, learn, live, dream and communicate with each other.

The Future Design Alliance Karlsruhe/ Heidelberg - an open conspiracy between art, technology and science - features its new European program at the BEYOND Symposium 2016, namely "Future Design - Artistic Visions for Europe and BEYOND". An international consortium on Virtual Reality and Virtual Fantasy, on Click Dreams, Moving Paintings, Space-Time Narratives and Ambient Art. Additionally, the international movement on Future Design Thinking will be reflected.

Artists from around the world tell a new positive and critical narrative and, by this, create an intersubjective reality that facilitates desirable improbabilities, harvest opportunities and solve urgent global problems.

The best things cannot be purchased by money.

**September 29, 2016 – October 01, 2016**

**ZKM | Center for Art and Media  
Lorenzstraße 19  
76135 Karlsruhe**

**Thursday // 9 a.m. – 6.15 p.m.  
Friday // 10 a.m. – 6 p.m. (Moderated by Kathleen Schröter)  
Saturday // 10 a.m. – 6 p.m.**



FUTURE DESIGN

**Prof. Ludger Pfan**

Head of 3D-Festival BEYOND

**Thursday September 29, 2016, 9.15 a.m.**

**ZKM\_Media Theater**



FUTURE DESIGN

**Ondřej Cakl**

Curator and Cultural Manager

**Thursday September 29, 2016, 9.50 a.m.**

**ZKM\_Media Theater**



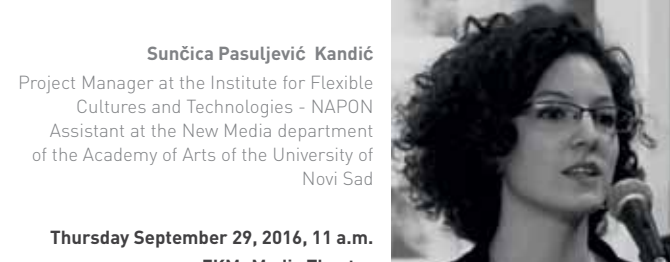
FUTURE DESIGN

**Ena Hodžić**

Director at Kontejner

**Thursday September 29, 2016, 10.25 a.m.**

**ZKM\_Media Theater**



FUTURE DESIGN

**Sunčica Pasuljević Kandić**

Project Manager at the Institute for Flexible Cultures and Technologies - NAPON  
Assistant at the New Media department of the Academy of Arts of the University of Novi Sad

**Thursday September 29, 2016, 11 a.m.**

**ZKM\_Media Theater**

## Prof. Ludger Pfan

### Future Design - Artistic Visions for Europe and BEYOND

Over the coming decades, new technologies will alter our lives and the way in which we perceive it beyond our imaginations. Future Design is a creative conspiracy of science, technology, industry and art. It is about the way of thinking and shaping the future actively and consciously based on European values - not only human and citizen's rights, but also sexual emancipation, freedom and environmental thinking. Future Design gives new and critical views on the imagination and new insights into the reality.

## Ondřej Cakl

### All-Too-Human Envisioning of Artificial Intelligences

One of the most discredited notions of occidental civilization is the belief that technologies are actually un-human and represent the threat of a new order bereft of humanity. From this point of view, the biggest danger for living artificial intelligence would be that it will most likely be "brought to life" by us, average humans. As a projection of our notion of otherness, it could just either be exploited by us or destined to overrule humanity, and indeed simply wash us away into nothingness.

## Ena Hodžić

### Art and Technology through the Prism of Device\_art

Device\_art is the name of the project led by a Croatian team of curators called Kontejner. It is exploring interactions between art and technology from the device point of view - that is dealing with technological devices as an artistic medium in contemporary art. Since the beginning of the project in 2004, what is called „device art“ has become an important international art tendency recognized as a specific art movement spanning all over the world, from California to Japan.

## Sunčica Pasuljević Kandić

### Napon - Algorithmic Futures

Our approach and use of emerging technologies are defining our future and Napon practices are oriented towards this kind of thinking. We work in the area of contemporary artistic practices based on digital technologies and ICT that are critically analyzed and (re)interpreted. The presentation will briefly outline Napon's practice and participatory role in the Future Design project. Some of the areas are algorithmic governance, SMART technologies and critical approaches to art & tech.



FUTURE DESIGN

**Tanja Bastamow**

Digital Artist in the fields of Digital Set Design, Animation, Graphic Design and Post Production

**Thursday September 29, 2016, 11.35 a.m.**  
**ZKM\_Media Theater**

## Tanja Bastamow

### Immersed in Digital Space

As technology continues to develop, the still highly visible border separating digital content and the physical world will become increasingly transparent. Digital spaces will merge with physical reality, creating mixed reality spaces for us to inhabit. Completely virtual environments will co-exist with the physical spaces, enabling us to effortlessly flow between these spaces. Who designs these augmented spaces and virtual environments? What are the aesthetics of this mixed reality?



FUTURE DESIGN

**Ninel Çam**

Choreographer and Performance Artist

**Thursday September 29, 2016, 12.10 p.m.**  
**ZKM\_Media Theater**

## Ninel Çam

Parallel to her 'official curriculum' in science and architecture, Ninel Çam learned and worked with different dance techniques, founded own dance performance groups and was involved in several choreographic and performance projects within Europe. Nowadays, she is working as a doctorate candidate in Art Research at the ELO Film School - Aalto University in Helsinki, where she discovered the theory of Dancing Dialectics®.



FUTURE DESIGN

**Galina Mihaleva**

Assistant Professor at the School of Art, Design and Media at Nanyang Technological University

**Thursday September 29, 2016, 2.20 p.m.**  
**ZKM\_Media Theater**

## Galina Mihaleva

### Wearable Installation and Human Interaction - "Generative Membrane"

The piece "Generative Membrane" materializes the abstract concept of humans interacting with microbes. The structure created by digital bacteria generated from bio-inspired algorithm to cover the sculpture is realized by implementing sensors in the textile object, which reacts to touch, moisture, heat and triggers. The aim of this talk is to describe the design process and implementation of an interactive installation that lets viewers paint pictures with the sound of a textile object from touch.

**Frederic Fol Leymarie**

Professor of Computing at Goldsmiths at the University of London

**Thursday September 29, 2016, 2.55 p.m.**  
**ZKM\_Media Theater**



FUTURE DESIGN

## Frederic Fol Leymarie

### Beyond Drawing

The art of drawing can be used to learn about human visual perception, natural movements and artistic generative skills, which then permit to explore its biomimicry in articulated machines. In turn, such robotic systems allow us to further study the human capacity to dynamically create artefacts. As we embed our new understanding into increasingly more sophisticated computational models, we enable the transfer of complex and personal artistic skills to robotic platforms.





**Ina Conradi**

Award-winning New Media Artist  
Associate Professor at the School of Art,  
Design and Media at Nanyang Technological  
University

**Thursday September 29, 2016, 4 p.m.**  
**ZKM\_Media Theater**

FUTURE DESIGN

## Ina Conradi

### Media (Wall) Nexus - Intersection between Art, Science, Technology and Culture in a Public Art Space

Artistic and design knowledge helps us to design elements that are not only beautiful, but can trigger emotions and actions. The community-based social art and its participatory and inclusive nature in particular has been the source of inspiration for young artists and designers. The talk presents a community forming public art project created together with the Nanyang Technological University Art & Heritage Museum, Singapore.



**Philippe Pasquier**

Award-winning New Media Artist  
Associate Professor at the School of Art, Design  
and Media at Nanyang Technological University

**Thursday September 29, 2016, 4.35 p.m.**  
**ZKM\_Media Theater**

FUTURE DESIGN

## Philippe Pasquier

### Generative Art and Computational Creativity

Computational creativity is a new and expanding field that brings together scientists and artists to design generative systems that are tackling creative tasks at human competitive levels. We will introduce and motivate these new developments of artificial intelligence and machine learning towards computer-assisted creativity. We will illustrate our discourse with examples of systems designed and developed at the Metacreation Laboratory that compose music or produce 3D character animation.

26

**Robert Stuart-Smith**  
Founding Director of "rs-sdesign"  
Co-founding Director of the collaborative  
research practice "kokkugia"  
Studio Course Master in the AA.DRL Master's  
program at the Architectural Association  
School

**Thursday September 29, 2016, 5.10 p.m.**  
**ZKM\_Media Theater**



FUTURE DESIGN

## Robert Stuart-Smith

### Design and Production using Behavior-based Robotics

Behavior-based Design and Manufacturing explores potentials of engaging with robotic production processes through behavior-based programming. Additive manufacturing enables design to operate to production as well as throughout the manufacturing process. This provides creative and logistical efficiencies and opportunities, which will be discussed in relation to innovative research projects that develop capabilities for on-site and off-site additive manufacturing, forms of computational design and robotic manufacture.

27

**Kibwe Tavares**  
Award-winning Architect and Filmmaker  
Director of "Factory Fifteen"  
TED Fellow

**Thursday September 29, 2016, 5.45 p.m.**  
**ZKM\_Media Theater**



FUTURE DESIGN

## Kibwe Tavares

### Embracing Uncertainty

As artists, we spend a lot of our time feeling uncertain. We feel uncertain about our work, the reasons we do it, where and if it belongs in the world, whether we will get another commission, or even whether we will be continuing to do our work in the next few months. It is easy to forget that all the uncertainty often leads to our best and most interesting work and takes us on the most interesting paths. The talk is about embracing that uncertainty and events in your life ultimately define the art you create.



VIRTUAL REALITY

**Dr. Ralf Schäfer**

Division Manager "Video" at Fraunhofer Heinrich Hertz Institute

**Friday September 30, 2016, 10.15 a.m.**  
**ZKM\_Media Theater**

## Dr. Ralf Schäfer

### Generation of High Quality Video Content and Virtualization of Human Bodies for VR

At Fraunhofer HHI, a complete chain for capturing, processing, transmission and display of panoramas and spheres has been developed, including four generations of omnidirectional cameras in 2D and 3D. Using this equipment, a large number of VR productions of various events and different genres have been made partially in combination with live streaming. Another important R&D topic is the virtualization of human bodies, which can be integrated into the virtual world.



VIRTUAL REALITY

**Sönke Kirchof**

Founder and CEO of "reallifefilm international GmbH"

**Friday September 30, 2016, 10.50 a.m.**  
**ZKM\_Media Theater**

## Sönke Kirchof

The pace of change in media production has increased dramatically during the past years. Next to new workflows that come along with new technologies, new ways of creative storytelling have to be developed. Focusing on stereoscopic 3D and the new wave of Virtual Reality, the talk will give insights into developments and effects of narrative storytelling for images beyond framed screens and linear distribution to static environments.

**Aljoša Smolic**  
Professor of Creative Technologies at Trinity College Dublin

**Friday September 30, 2016, 11.25 a.m.**  
**ZKM\_Media Theater**



VIRTUAL REALITY

## Aljoša Smolic

Extending visual sensation to the limits of human perception, while enabling a maximum of artistic freedom and creative potential has always been the focus of my research. Technologies for image-based visual computing have been the means to achieve that. In my new role as Professor of Creative Technologies at Trinity College Dublin, I now have the opportunity to take this to a new level. This talk will highlight some of my past achievements and an outlook to plans around 3D, VR, AR, HDR, and beyond.

**Dr. Elke E. Reinhuber**  
Assistant Professor at the School of Art, Design and Media at Nanyang Technological University

**Friday September 30, 2016, 1 p.m.**  
**ZKM\_Media Theater**



VIRTUAL REALITY

## Dr. Elke E. Reinhuber

### The Holodeck in the Making - Between Sensorama and Cornflakes

Currently, screens covering our peripheral vision for a shared user experience or individual excitement enjoy universal curiosity. Generating great video footage for these settings is still a difficult challenge. New methods for storytelling including the space behind the viewer require thorough attention. Engaging an audience in a multi-screen environment is one main concern, as how to apply the animated still image as foundation for immersive movies, gauging own practice-based research in media arts.



VIRTUAL REALITY

**Lauren Moffatt**

Artist in the fields of Video, Performance and Immersive Technologies

**Friday September 30, 2016, 1.35 p.m.**  
**ZKM\_Media Theater**

## Lauren Moffatt

**VR Project “The Day After”**

How can we build spaces for rehearsing the future in virtual reality and places where we can share our individual perspectives? How does the form of story adjust as viewers enter the screen and how is it possible for the viewer to be part of this process of shaping story? Lauren Moffatt will discuss these and other questions by presenting the script and production plan of the experimental VR project “The Day After”, developed alongside director Jean-Pierre Bekolo.



VIRTUAL REALITY

**Vibeke Sorensen**

Professor and Chair at the School of Art, Design and Media at Nanyang Technological University

**Friday September 30, 2016, 2.10 p.m.**  
**ZKM\_Media Theater**

## Vibeke Sorensen

**DATA: Design, Art, Technology and the Anthropocene**

This talk will discuss innovative ideas and works pioneered by artists and designers that affect positive change in the environment and Anthropocene. With emphasis on new possibilities at the intersection of design, experimental art, global Big Data, world cultures and the ecology, it will range from sustainable fashion and bio-art/design to augmented reality and smart cities. It will also discuss the installation “Mood of the Planet” and present “Mayur”, a visual-music work informed by Asian textiles, symbols and cosmologies.



VIRTUAL REALITY

**Sven Haeberlein**

Founder and Executive Director of “Trotzkind GmbH”

**Friday September 30, 2016, 3.30 p.m.**  
**ZKM\_Media Theater**

## Sven Haeberlein

**Trotzkind**

Sven Haeberlein began his professional path in the field of digital post-production. Before starting own film projects, he gained experiences in 3D-animation, compositing and cutting. At the Hochschule Mainz – University of Applied Sciences, he studied “Time-based Media” with the focus on digital media, film and interaction. His startup company “Trotzkind” develops both technologies and contents for VR. Together with the Fraunhofer Heinrich-Hertz Institute, it is currently working on a technology to make people in VR and AR perceptible.



VIRTUAL REALITY

**Prof. Dr. Thomas Metzinger**

Director of Theoretical Philosophy at the Johannes Gutenberg University  
Fellow at the Gutenberg Research College

**Friday September 30, 2016, 4.05 p.m.**  
**ZKM\_Media Theater**

## Prof. Dr. Thomas Metzinger

**The Transparent Avatar in Your Brain**

“Virtual Embodiment” and “Robotic Re-Embodiment” refer to new technologies in which humans not only control the movements of a physical robot or an avatar in virtual reality, but in which they increasingly use them as tools for perception and social interaction, beginning to identify with surrogate bodies. What do we learn about human self-consciousness and psychological risks of VR-technology? What are ethical and cultural implications of introducing such technologies into societal practice?



**Dr. Andrea Nanetti**

Associate Professor and Associate Chair at the School of Art, Design and Media at Nanyang Technological University

**Saturday October 01, 2016, 10 a.m.**  
**ZKM\_Media Theater**

FUTURE DESIGN THINKING



**Yulu Wang**

Marketing and Investment Director at CFLD (China Fortune Land Development)

**Saturday October 01, 2016, 10.35 a.m.**  
**ZKM\_Media Theater**

FUTURE DESIGN THINKING



**Charles Wang**

Deputy Director and Associate Professor at Beijing Film Academy

**Saturday October 01, 2016, 11.10 a.m.**  
**ZKM\_Media Theater**

FUTURE DESIGN THINKING



**Thorsten Bauer**

Founder of the artist collective "Urbanscreen" and co-founder of "Urbanscreen GmbH Co&KG." Creative Director of international installations in the field of Projection Mapping

**Saturday October 01, 2016, 11.45 a.m.**  
**ZKM\_Media Theater**

FUTURE DESIGN THINKING

## Dr. Andrea Nanetti

### **Animated Knowledge Aggregations - Old and New Silk Roads as a Showcase**

Using the Silk Road as a showcase, the NTU-ADM team - with its representative Luo ShenShen - in collaboration with Microsoft Research and FullDomePro, presents how animation can be used to overcome the problem of knowledge aggregation.

A work conducted by Dr. Andrea Nanetti together with his PhD students at the NTU School of Art, Design and Media Luo XinZhang and Liu DanYun.

## Yulu Wang

### **VR in China - A Competition of Speed**

Since the beginning of 2015, a huge amount of investment has involved the VR industry. More and more companies are seizing the different parts of VR business. This gigantic business request is still pushing the fast development of technology. This presentation will give an overview of VR: history, key nodes of major events as well as a preview on VR's potential opportunities in China.

32

## Charles Wang

### **Behind VR - The Relation, Trend and Practice on Image, Game and Storytelling**

VR currently represents one of the most influential topics of the world. From a visionary perspective, it can be seen as a revolution of visual and image technology. This revolution will lead people from the age of 2D to a 3D motion picture age. In his speech, Charles Wang explores the relationship between image, game and storytelling and introduces the practice at Beijing Film Academy.

33

## Thorsten Bauer

We find ourselves at the beginning of a digital revolution within the real space. Spatial dissolved media may only take a useful part in our lifestyle if they adapt radically to the real space in form, speed and density. The conceptual starting point is not based on the digitalization of our living environment, but rather on the analogization of digital contexts. Narrative formats and grammars that were valid until now won't work in this environment - adequate narrative forms and designs for space-media still have to be invented.



**Alexander Colsmann**

Head of Organic Photovoltaics Group at the Karlsruhe Institute of Technology

**Saturday October 01, 2016, 1.30 p.m.**  
**ZKM\_Media Theater**

FUTURE DESIGN THINKING



**Prof. Dr. Mark Post**

Professor and Chair of Physiology at Maastricht University

**Saturday October 01, 2016, 2.05 p.m.**  
**ZKM\_Media Theater**

FUTURE DESIGN THINKING



**Christoph Backes**

Economist, Business Consultant and Stage Actor  
Executive Director of the "u-institut"

**Saturday October 01, 2016, 2.40 p.m.**  
**ZKM\_Media Theater**

FUTURE DESIGN THINKING

**Keith Cunningham**  
Screenwriter and Consultant

**Saturday October 01, 2016, 3.45 p.m.**  
**ZKM\_Media Theater**



FUTURE DESIGN THINKING

## Alexander Colsmann

### Eco-friendly Fabrication of Organic Solar Cells

Future solar cells will be fabricated on mechanically flexible and light weight carriers, addressing the requirements of architectural design or mobile applications. They will come with arbitrary shapes and colors or even be semi-transparent, opening up avenues to new markets, e.g. for truly transparent photovoltaics in buildings and automotive applications. Additionally, future solar cells may be organic, fabricated entirely from eco-friendly and sustainable processes, yielding unsurpassed low energy payback times.

34

## Prof. Dr. Mark Post

### Beyond Meat and other Unsustainable Food

With a growing population and increasing wealth in developing countries, the demand for meat will rise appreciably in the coming decades. Vegetable protein based meat substitutes and tissue engineered beef from bovine muscle stem cells are potential solutions for an imminent scarcity. In addition, impacts of this technology on our emotional bond with food and the agricultural society and landscape need our attention. Culturing meat will happen and we need to prepare for it.

## Christoph Backes

### Mind the Gap

The speech demonstrates the impact of Future Design on the work of the "Kompetenzzentrum Kultur- und Kreativwirtschaft". Thereto, the fellow-network will be presented as an important radar and sounding-board. Practical examples will show the approach of Future Design-Storytelling in the "Kompetenzzentrum": "Failure as an opportunity". Furthermore, skateboard-culture, industry 4.0, solution-oriented journalism, bots, generation game, social engagement loops, time, gender swoops as well as the narrations of the future will be addressed within this talk.

35

## Keith Cunningham

### Designing the Future - Living Systems and the Ecology of Stories

Stories have very much to do with who we are and what we can become. Whatever is put up on the screen or into public domain models attitudes and beliefs for an audience. Our deepest attitudes are embedded in bio-cognitive systems that determine if our species can transition to sustainability and survival. This talk will be a tour of the evolution of those deepest attitudes through myth, drama, and the current media landscape.





Vesna Petresin 'Synaescape II'

# FOR LUNCH & BREAK

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BEYOND recommended

ZKM\_Foyer  
Lorenzstraße 19  
76135 Karlsruhe



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## 3D-Festival BEYOND

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