



PROGRAM

09-12 OKTOBER 2014

3D-SYMPOSIUM BEYOND

KARLSRUHE



SYMPOSIUM 2014
FUTURE DESIGN

Artistic visions for Europe and BEYOND



Panel discussion Stereo Sisters 2013

09–12 OKTOBER 2014

3D-SYMPOSIUM BEYOND

KARLSRUHE

The city of Karlsruhe, together with the ZKM | Center for Art and Media and the HfG | University of Arts and Design Karlsruhe will be hosting the third international 3D Symposium BEYOND from October 9–12.

Further information on all events:

www.beyond-festival.com



The 3D symposium BEYOND has been taking place annually at the ZKM | Center for Art and Media Karlsruhe since 2011. This year, the symposium – a meeting of science, technology and art – bears the title “Future Design”. Expert lectures, art installations and films, shed light on the question as to how we shall be leading our lives in the future, and how we can actively and consciously shape such a future. Focus is placed on solving the contradiction between nature and technology, and on how to maintain our humanistic value structures.

The BEYOND symposium is well-suited to Karlsruhe since our city is young, innovative and future-oriented, both in research and development but no less in the arts and media. With ap-

proximately 30,000 employees and 4,200 businesses in the information and communications technologies, the Karlsruhe region counts among the leading IT locations in Germany. With its 25,000 students, the Karlsruhe Institute of Technology is among the leading research institutions worldwide in the field of technology. With “Perfekt Futur”, the Zentrum für kreative Gründerinnen und Gründer [Center for Creative Founders], located at the former slaughter house, we have initiated a point of contact for culture and creative economy. With its Media Museum, the Museum of Contemporary Art, as well as its research institutions and archives, the Center for Art and Media Karlsruhe – this year celebrating its 25th anniversary – radiates far beyond the boundaries of Karlsruhe, and enjoys an outstanding international reputation. At the same time, Karlsruhe is the home of law, the city of fundamental and human rights. Our urban society, founded as it is on liberal principles, campaigns with an undeterred conviction against racism and xenophobia, and all forms of discrimination.

It is for such reasons as these that Karlsruhe is exactly the right site for hosting the BEYOND symposium: what could be more apt than a site in which “scientists and artists, committed as these are to their values, openly discuss potential risks”, as BEYOND founder, Prof. Ludger Pfanz, writes in the accompanying text to this symposium. I sincerely wish greatest success to all participants of BEYOND 2014.

Dr. Frank Mentrup
Mayor of Karlsruhe



BEYOND Award Winner 2013: “Elysian Fields”



FUTURE DESIGN, ARTISTIC VISION: EUROPE AND BEYOND

Finally, stereoscopic and auto-stereoscopic technologies, mobile devices with 3D capabilities, 3D lasers, laser scanners, 3D printers – aug-

mented reality and new interfaces developed by engineers and artists – present the full scope of the third dimension for creative use in representation and expression, thereby creating new art-forms and business models in all industries and, above all, in the cultural and creative sphere. In addition to current productions and trends in stereoscopic, multi-scopic and auto-stereoscopic film in cinema and television, BEYOND focuses on new forms of “space-time narration” and on “Future Design”.

Several remarkable technologies are now converging: auto-stereoscopic monitors, clever software, novel materials, robots with greater versatility, new processes (notably 3D printing), clean and free energy along with an entire range

of web-based services. Human organs, objects from sand and sun, even entire houses can now be reproduced with 3D printers. Organs and meat can be created from stem cells and printed in 3D. The consumer becomes the producer or “maker”. And the “maker” is not only manufacturer, but also creator, designer, and artist.

Future Design turns on the art of actively and consciously thinking about the future. It is informed by humanist values that endorse the notions of universal human rights – from individual freedom and sexual emancipation to environmental responsibility.

In view of the risks and potential collateral damage connected with these new technologies, scientist and artist must take a stand for their values, by openly discussing the potential and risks, and by formulating a vision for EUROPE and BEYOND.

Welcome to BEYOND 2014.

Prof. Ludger Pfanz

Head of BEYOND 3D-Symposium



Panel discussion: Cave of Forgotten Dreams 2011



Following a series of successful symposia and exhibitions that have brought together leading artists, technicians and producers of digital cinema culture – from computer supported production to digital distribution – the festival BEYOND will continue to be, especially for Europe, an important element of digital society – above all, to the extent that it continues to present the cinematographic imagination beyond its boundaries.

Prof. Peter Weibel

Chairman and CEO ZKM | Center for Art and Media Karlsruhe

THURSDAY October 9, 2014

S. 22 10 a.m. ZKM_Media Theater

Know Wear / Every Wear

Prof. Vibeke Sorensen

S. 22 10.30 a.m. ZKM_Media Theater

The Challenge of the Challenge

Paul Moody

S. 23 11 a.m. ZKM_Media Theater

Rethinking Film Grammar and
Digital Narration

Josephine Derobé, Fabienne Tsai,
Antoine Le Bos

11.45 a.m.ZKM_Media Theater

Panel Discussion: The Future of
Immersive Imaging Narration

Moderated by Kathleen Schröter

12.30 p.m. Lunch Break

S. 23 1.30 p.m. ZKM_Media Theater

Native 3D Image Acquisition

Needs Highest Solutions

Sönke Kirchhof

S. 24 2 p.m. ZKM_Media Theater

Reveal the Invisible in 3D

Chris Wickenden

2.30 p.m. ZKM_Media Theater

Panel Discussion: The Future of
Immersive Imaging Production

Moderated by Kathleen Schröter

S. 24 3.30 p.m. ZKM_Media Theater

Multiview – More Views = Better 3D

Dr. Ralf Schäfer

S. 25 4 p.m. ZKM_Media Theater

Let's not Bore Alice:

Stereo 3D in Apps

Diego González Zúñiga

S. 25 4.30 p.m. ZKM_Media Theater

From 'Minority Report' to the Use
of the 3D Function on Your TV: User
Interface Design of Tomorrow

Dale Herigstad

5 p.m. ZKM_Media Theater

Panel Discussion: Don't Wait for the
Content to be Produced, Use What's
There and Design the Future!

Moderated by Kathleen Schröter

5.30 p.m. ZKM_Media Theater

Panel Discussion:

3D is dead, long live 3D

Moderated by Kathleen Schröter

6 p.m. ZKM_Media Theater

Film Screening:

"Forget-Me-Not" & "Elysian Fields"

7 p.m. ZKM_Kubus

Concerts

S. 16 Bernd Lintermann & Ludger Brümmer

"Spin"

S. 17 Paul Modler

"Excerpts from 'No Place to Hide' "

BEYOND 3D

FRIDAY October 10, 2014

S. 26 9 a.m. ZKM_Media Theater
Looking for the Philosophers' Stone,
Art & Science Project
Joanna Hoffmann-Dietrich

S. 26 9.35 a.m. ZKM_Media Theater
"Cinematographer's Canvas –
Cinematic Space With Borders"
Timo Heinänen C.S.F.

S. 27 10.10 a.m. ZKM_Media Theater
The Evolution of Post Conversion
Angus Cameron

S. 27 10.45 a.m. ZKM_Media Theater
Technological Democratization and
the World of the Future
Alfonso Ruiz Rallo

S. 28 11.30 a.m. ZKM_Media Theater
Asunción López-Varela

S. 28 12.15 a.m. ZKM_Media Theater
Tech for Beyond:
3D, HFR, H-res, HDR
Dr. Aljoša Smolic

12.45 p.m. Lunch Break

S. 29 2 p.m. ZKM_Media Theater
The Helix Network
Manfred J. Pauli

S. 29 2.30 p.m. ZKM_Media Theater
Documentation of the Built Environ-
ment: Using the Latest 3D Recording
Technologies to Precisely Record
Heritage Sites Within Scotland
Douglas Pritchard

S. 30 3.05 p.m. ZKM_Media Theater
Transactions in 3D space: Database
or Narrative Events?
Prof. Dennis Del Favero

S. 30 3.40 p.m. ZKM_Media Theater
Vincent Heuveline

S. 31 4.20 p.m. ZKM_Media Theater
ALIAS YEDERBECK –
Expanded Animation Cinema
Prof. Frank Geßner

S. 31 4.50 p.m. ZKM_Media Theater
The D*Haus
D*Haus Architects

S. 32 5.25 p.m. ZKM_Media Theater
Emotions & 3D Stereoscopy (S3D) –
Let it Be
Luis Perez-Bayas

S. 32 6 p.m. ZKM_Media Theater
Art exhibition Opening with
Philippe Jaulmes

7.15 p.m. ZKM_Media Theater
Filmscreening "Whitewashing of 5
Pointz" and "Cathedrals of Culture"

BEYOND the Status Quo

SATURDAY October 11, 2014

S. 33 9 a.m. ZKM_Media Theater
“Reanimated Painting”
Ina Conradi-Chavez

S. 33 9.30 a.m. ZKM_Media Theater
Multithreaded tales: Reconsidering
Narrative Structures in a Post-Linear Era
Elke Reinhuber

S. 34 10.05 a.m. ZKM_Media Theater
Exploring Parallax on
Governors Island
Martina Mrongrovius

S. 34 10.40 a.m. ZKM_Media Theater
Wearable Technology:
Transformations and Traditions
Dr. Galina Michaleva

S. 35 11.15 a.m. ZKM_Media Theater
International Feminin Digital Project
Gülsel Özkan

S. 35 11.40 a.m. ZKM_Media Theater
Tsitsi Dangarmbga

12.20 a.m. ZKM_Media Theater
Panel Discussion:
“Designing for the Future”
Moderated by Ludger Pfan

1 p.m. Lunch Break

S. 36 2 p.m. ZKM_Media Theater
Business Planning or Drop Your Tools
Christoph Backes

S. 36 2.30 p.m. ZKM_Media Theater
3D printing – What Can We Hope for
and Expect for the Future?
Petra Fastermann

S. 37 3.05 p.m. ZKM_Media Theater
A Glimpse Behind the Scenes of
latest Research on Production and
Post-Production Techniques
Prof. Markus Gross

S. 37 3.40 p.m. ZKM_Media Theater
The Prospect of Cultured Beef
Prof. Dr. Mark Post

S. 38 4.25 p.m. ZKM_Media Theater
André Brössel

4.55 p.m. ZKM_Media Theater
Dr. Vesna Petersin-Robert

S. 38 5.15 p.m. ZKM_Media Theater
Cradle to Cradle® -
Beyond sustainability
Michael Braungart

6.15 p.m. ZKM_Media Theater
Panel Discussion:
“Designing for Abundance”
Moderated by
Peter Weibel & Prof. Ludger Pfan

7 p.m. Break

8.15 p.m. ZKM_Foyer
BEYOND evening event
Performance “SonoFusion”
by Dr. Vesna Petersin-Robert
Opening Address by Mayor Dr. Frank
Mentrup
Disposition of the BEYOND-honorary
awards

10.30 p.m. ZKM_Foyer
Aftershow Party
Installations by Lichtgestalten and
music by KNSTK (steadywork)

BEYOND Sustainability

SUNDAY

Filmscreening and Qs&As

10.30 a.m. ZKM_Media Theater

Alias Yederbeck

12.15 p.m. ZKM_Media Theater

"The Silver Ghosts" and
"Back 2 The Wild"

with Caroline Orme and Martin Uren

12.45 p.m. ZKM_Media Theater

National Filmboard Canada
Block and Surprise Film
with Edgar Gonzales

2.25 p.m. ZKM_Media Theater

"Kuku" and "Eve"
with Henrich Zucha & Klára
Jakubová

3 p.m. ZKM_Media Theater

"All Inclusive" and "Joule"

4 p.m. ZKM_Media Theater

"The Black Drummer Who Smiles"
"The Challenge" (Work in Progress)
with Jens Willms, Martin Morlock &
Dominic Thiel

More Information about the
films you will find under

www.beyond-festival.com

BEYOND the Screen

3D ART

The BEYOND art exhibition will be on show from October 11 to October 12, 2014, from 10 a.m. till 6 p.m. each day. A wine reception will accompany the opening ceremony at 6 p.m. on Friday, October 10, 2014.

At the HfG, Karlsruhe University of Arts and Design, visitors may discover and travel through several spatio-temporal 3D installations. Visitors to the ZKM will be among the first audiences worldwide to see the PANRAMA, a spherical, frameless cinematic form, which comes extraordinarily close to the physiology of human vision. Visitors will also have the opportunity to try the e-INSTALLATION, a new, virtual way of experiencing art works, and to visit an entire building transformed into an interactive audio-visual installation.



The PANRAMA System by Philipp Jaulmes



Bernd Lintermann, Ludger Brümmer
Thursday October 9, 2014, 7 p.m.
ZKM_Kubus

Spin

Spin lets you experience rotations articulating themselves by variations and constant modifications. An algorithmic process enriched with random processes generating 3D images. The sound material behaves similar. Music transformations are frequently used since the Baroque period, called variations. However, a principle of rotation was not spread before Minimal Music got popular. Today it is an established scheme in the generation of material within an abstract context: in dance, art, music and video. But the synthesis of 3D music and 3D image, both generated algorithmically, is quite rare to find.

For: 3D sound and 3D projection
Video: Bernd Lintermann
Music: Ludger Brümmer

Spin © Bernd Lintermann & Ludger Brümmer

Paul Modler
Thursday October 9, 2014, 7.30 p.m.
ZKM_Kubus

Excerpts from 'No Place to Hide'

No Place to Hide is a publication by G. Greenwald which is based on digital documents handed over to journalists and organisations by E. Snowden in 2013.

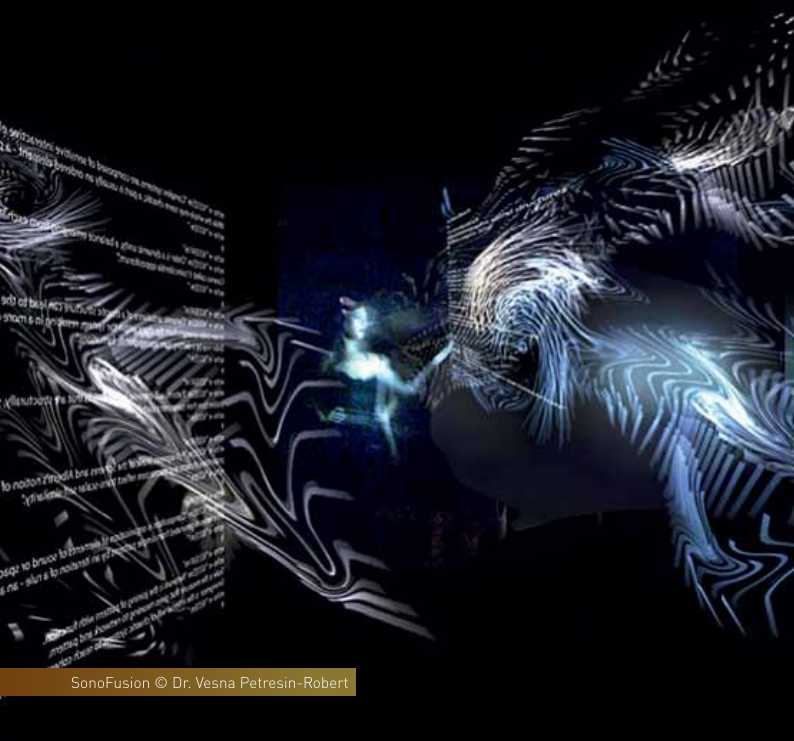
A dancer interacts through a tracking system with motor-controlled speakers which uses a text-to-speech software to read out excerpts from ASCII documents to the audience. Body as a paradigm for self-conception is opposed to machine.

Who serves whom, who controls who, or do both combine in a hybrid? Or will the two fall apart in fear and destruction? Spatial audio is explored as a symbol for immersivity and embodiment of media.

Choreography: M. Mandras
Sound design: Chemo Cœur
Concept and realization: P. Modler



Excerpts from 'No Place to Hide'



SonoFusion © Dr. Vesna Petresin-Robert

Dr. Vesna Petresin-Robert
Saturday, October 12, 2014, 8.15 p.m.
ZKM_Media Theater

SONOFUSION

Sound gives Shape to Space.
Movement gives Shape to Sound.

The performance explores the ways in which sound impacts on matter, our sense of being in space, and the permeable boundaries between the body and its environment. The performer 'sculpts' the space with her voice and an immersive 3D soundscape, played through a gesture-controlled interface. The composition and the vocal technique play with textures, feed-back and the space between tones, thus creating constant movement and transformation.

3D FILM

We are proud to present "CATHEDRALS OF CULTURE", the 3D film project with Wim Wenders and Robert Redford on the soul of buildings, scheduled to start on Friday October 10, 2014, at 19.15. The project began two years ago with a workshop at the BEYOND Festival. The producer, Erwin Schmidt will be present in person. On Sunday, BEYOND is scheduled to screen films that demonstrate the new possibilities 3D can add to cinematic experience: from JOULE, a film with references to early and even pre-cinema through to animations made with the first freehand 3d animation tool Imax SANDDE, and ORA, which combines 3D with thermic information. BEYOND shows avant-garde in the best sense, serious both in style and method and in narrating space-time stories. Most filmmakers will be present in person.



"Cathedrals of Culture": The Berlin Philharmonic (2014)



3D Visual Party 2013

Saturday October 11, 2014

8.15 p.m. – “SonoFusion”, by Dr. Vesna Petresin-Robert

8.30 p.m. – Champagne Reception

9 p.m. – Welcome Speeches

From 10.30 p.m. – Aftershow Party

ZKM_Foyer

BEYOND EVENING EVENT

The evening starts with the performance “SonoFusion” by Dr. Vesna Petresin-Robert and a champagne reception followed by the opening address by the Mayor of Karlsruhe Dr. Frank Mentrup. It will then be time to celebrate: Installations by Lichtgestalten and music by KNSTK (steadywork) await you.

3D SYMPOSIUM

Designing for the Future

In the coming decades new technologies will change our lives and the way in which we perceive them in hitherto unimaginable ways. The “Future Design” Symposium is a creative collusion of science, technology and art – an experimental laboratory for new art forms and perspectives on the social impact of technologies within Europe. “Future Design” explores the future of digital technology from atoms to bits and from bits back to atoms again, highlighting the ways in which these technologies are adapted in different cultural contexts. The chief objective is to attract widespread attention to these technologies, and to generate debates and interest in their use among independent artists and otherwise under-represented groups. Future Design provides new and critical views on imagination and new insights into reality. In view of the risks and possible collateral damage connected to these new technologies, scientist and artist must make a stand for their values, and do so by openly discussing the potential and risks, and by formulating a vision for EUROPE and BEYOND.



Panel Discussion: “From Real to Cloud” 2013



Prof. Vibeke Sorensen

Professor and CEO of the School of Art, Design and Media, Singapore

Thursday October 9, 2014, 10 a.m.
ZKM_Media Theater

BEYOND 3D

Prof. Vibeke Sorensen

Know Wear / Every Wear

This talk considers the multifaceted dimensions of the human mind-body relationship and the ways in which new technologies in the metaverse are presently transforming us and our relationship to the environment. Examples include smart textiles, wearables, 3D printing, sustainable media, and various possibilities in the global Asian context.



Paul Moody

Visiting Artist at the School of Art Design and Media; Singapore

Thursday October 9, 2014, 10.30 a.m.
ZKM_Media Theater

BEYOND 3D

Paul Moody

The Challenge of the Challenge

“The Challenge” is a stereoscopic documentary on the rehabilitation of people that suffer from spinal and brain injuries. We filmed in 3D to ensure a more precise representation of the way in which our eye perceives space and volume. The film draws the audience into the screen-space and the characters into the audience-space in such a way that the viewer is better able to appreciate the struggles we depict. The film adjusts Walter Murch’s “Rule of Six”, moving the “3 dimensional space of action” to a third position behind emotion and narrative. The objective is to use 3D as an improved means for reaching audiences at both the emotional and intellectual levels.

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**Josephine Dérobe,
Fabienne Tsai & Antoine Le Bos**

Thursday October 9, 2014, 11 a.m.
ZKM_Media Theater



BEYOND 3D

Joséphine Derobe, Fabienne Tsai & Antoine Le Bos

CROSS CHANNEL FILM LAB

With a total of eleven partners from France and the UK, Le Groupe Ouest European Film Lab created the Cross Channel Film Lab 2 experience near the Brittany coast, in 2006. The goal is to assist the development of innovative feature film projects in collaboration with R&D teams in the fields of stereo 3D, image/sound perception and visual effects. CCFL experience and research, along with the team of stereographers and 3D specialists led by Alain and Joséphine Derobe, is inspired by the idea of 3D images opening up a field for a complete renewal of poetic and sensorial exploration for both viewers and filmmakers.

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Sönke Kirchhof

Founder and CEO of
“reallifefilm international” GmbH

Thursday October 9, 2014, 1.30 p.m.
ZKM_Media Theater



BEYOND 3D

Sönke Kirchhof

Native 3D Image Acquisition needs Highest Quality Solutions

With respect to the creative approaches and technologies it uses stereoscopic filmmaking requires different approaches than those employed in conventional 2D filmmaking. However, the scheduling and budgeting of 3D Projects is still frequently compared to the 2D experience. In other words, native 3D Image acquisition requires the highest possible quality solutions - preferably without requiring the calculation of extra time for rigging and calibration. Thus, this keynote lecture focuses on efficiency in creative and technical approaches, as well as on one single economic workflow.



Chris Wickenden

Graduate Program Director and Designer,
3D-Mind & Media B.A.,
Fresenius University of Applied Sciences

Thursday October 9, 2014, 2 p.m.
ZKM_Media Theater

BEYOND 3D

Chris Wickenden

Reveal the Invisible in 3D

Does a 3D object disclose more about emotion and experience? Psychology allows in-depth entrance into emotions and the mind. In economy and politics problems are interpreted through two-dimensional graphs and interpretation of wordful strategies. In many cases we receive impressions of how something appears without really grabbing, touching or discovering an object. Would a 3D picture of an invisible subject help us to understand better and after that venture new routes?



Dr. Ralf Schäfer

Head of ITG Expert Committee "Digital
Image Coding"
Member of the Judge Committee of FK TG

Thursday October 9, 2014, 3.30 p.m.
ZKM_Media Theater

BEYOND 3D

Dr. Ralf Schäfer

Multiview – more Views = better 3D

3DTV faces major problems: there is not enough 3D content available; the quality of 3D content is not always sufficient; the production of 3DTV is far too expensive; users need glasses to watch 3D. Therefore major efforts are going on worldwide to solve these problems and some promising developments are on the way. Also Fraunhofer HHI and its partners are working on such technologies. Examples are a trifocal 3D camera system, which does not require mirrors and methods to automatically convert stereo to multiview. These developments will be explained during the presentation.

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Diego González Zúñiga

Computer Engineer, Costa Rica

Thursday October 9, 2014, 4 p.m.
ZKM_Media Theater



BEYOND 3D

Diego González Zúñiga

Let's not Bore Alice: Stereo 3D in Apps

With the renaissance of 3D movies, stereoscopic depth has proven itself as a tool for enhancing emotional narrative. This has led, in turn, to comparative research on 2D and 3D video stimuli, and to the emergence of a full-scale debate on both formats. Our task is to take this debate into the sphere of software. We believe 3D is capable of enhancing software and of altering contemporary thought on applications. Ranging from 'flat' parallax-induced to more 'spatially aware' user interfaces, the stereoscopic effect can alter the perception and emotional charge of our everyday tasks.

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Dale Herigstad

Emmy Award Winner
Co-founder of SeeSpace

Thursday October 9, 2014, 4.30 p.m.
ZKM_Media Theater



BEYOND 3D

Dale Herigstad

From 'Minority Report' to 3D for the Television: Navigating with Space

An expanded view of Television, where 3D screens will play a role in defining spaces for viewing and interacting with information. These new screen spaces place interface elements and information closer to the viewer, and are the first step to the elimination of screens altogether. 3D screens can be used to present layers of information and media in the space between the viewer and the screen, creating space and choreographing its content with spatially oriented interfaces.



Prof Dr. Hab. Joanna Hoffmann-Dietrich
 University of Arts in Poznan, PL
 Director of the Studio for Transdisciplinary
 Projects & Research
 Member of the Art & Science Node, Berlin

Friday October 10, 2014, 9 a.m.
ZKM_Media Theater

BEYOND the Status Quo

Prof Dr. Hab. Joanna Hoffmann-Dietrich

Searching for the Philosophers' Stone: A Project in Art & Science

The presentation focuses on the art project "Philosophers' Stone", part of the iGEM Team Heidelberg (Grand Prix 2013) research program. The project is inspired by Delftibactin, a peptide used for purifying gold. Among other things, the art work discusses the cultural roots of today's scientific practices by comparing and contrasting scientific research and the opus magnum in the age of alchemy. The Philosophers' Stone is understood, above all, as a metaphor of innermost human desire, cohesive knowledge, inner transformation and higher values.



Timo Heinänen C.S.F.
 Cinematographer, Photographer, Professor
 of Cinematography at the ELO Film School
 Helsinki, and Head of Film Studies at ELO,
 Finland

Friday October 10, 2014, 9.35 a.m.
ZKM_Media Theater

BEYOND the Status Quo

Timo Heinänen C.S.F.

"The Cinematographer's Canvas – Cinematic Space with Borders" –Research

My research focuses on the essential role cinematographers play in image creation in various aspect ratios. In view of the dearth of research on the topic from the standpoint of the cinematographer, further investigation into this aspect of filmmaking is important. The European tradition of close collaboration between director and cinematographer does not necessarily imply that sufficient attention is paid to the compositional and structural factors of the image. In many cases, a cinematographer himself ensures that the chosen frame is filled with compositional elements.

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Angus Cameron
 Co-founder of Vision 3
 Stereographer

Friday October 10, 2014, 10.10 a.m.
ZKM_Media Theater



BEYOND the Status Quo

Angus Cameron

The Evolution of Post Conversion

Post conversion is a valuable tool in the 3D industry and has evolved significantly over the past decade. The technology and quality has greatly improved its troubled beginnings. While, to date, the focus has previously centered on technology, it is the creative aspect and integration with native 3D photography which will prove of utmost importance for future success. It is essential to provide filmmakers with the tools and know-how to produce great 3D movies that engage and immerse audiences and, first and foremost, support the narrative,

Alfonso Ruiz Rallo
 Professor of Design Theory in the Faculty of
 Fine Arts at the University of La Laguna

Friday October 10, 2014, 10.45 a.m.
ZKM_Media Theater



BEYOND the Status Quo

Alfonso Ruiz Rallo

Technological Democratisation and the World of the Future

For a new technology to succeed, it must be able to reach the middle class on a mass scale, and aspire to do so without exception. However, high technology often cannot help but become a product of the elite in its early years of life, to the extent whereby its high sales prices devalue the necessary investment for its development. This paradox has been recurring throughout the development of the technologies that have changed the world, and we must be aware that true progress and social development will not exist without their transfer to all mankind.

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**Asunción López-Varela**

Professor at Universidad Complutense de Madrid
Member in the Executive Committee of the European Network of Comparative Literary Studies

Friday October 10, 2014, 11.30 a.m.
ZKM_Media Theater

BEYOND the Status Quo

Asunción López-Varela

Art, as meta-representation, gives autonomy to the kind of sense-experience which extends beyond the bounds of natural perception, and thus raises cognitive awareness. The term ekphrasis describes the skills that enable the translation of artistic content and its expression in different formats. It works primarily on analogic principles: visual or mimetic and narrative or diegetic. Avant-garde experiments break with these analog principles. I examine three examples: Lewis Carroll's poem Jabberwocky, which appears in the novel Through the Looking-Glass, Jan Švankmajer's 1971 movie of the same title, and Simon Biggs' 2010 digital installation, entitled reRead.

**Dr. Aljoša Smolic**

Senior Research Scientist at Disney Research Zurich
Head of the "Advanced Video Technology" Group

Friday October 10, 2014, 12.15 p.m.
ZKM_Media Theater

BEYOND the Status Quo

Dr. Aljoša Smolic

Tech for Beyond: 3D, HFR, H-res, HDR

Recently, technology trends for extending visual sensation have been receiving considerable attention. These trends range from stereo 3D dimensions, high frame rate (HFR), high resolution (H-res) and high dynamic range (HDR). The promise is that audience experience and the expansion of artistic expression will be expanded. However, in so far as some aspects may be driven more by technology and business than experience and content, not all expectations have been fulfilled. This talk summarizes key aspects of technology and perception, and presents recent related research results from DRZ.

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Manfred J. Pauli

Director The Helix Network
Accomplished project manager, business developer and innovation manager

Friday October 10, 2014, 2 p.m.
ZKM_Media Theater



BEYOND the Status Quo

Manfred J. Pauli

The Helix Network

SAP was challenged by the need to make the supposedly dry subject of business software tangible in a new and better way. At the same time, the balancing act between virtualization and precious personal contact to customers and partners had to be managed. This goal could be reached by implementing the presentation and collaboration platform "The Helix", where visitors are "hijacked" into a place analogous to Erich Kästner's "Flying Classroom". The usage of stereoscopic 3D helps here to span distances and harmonize the contradiction of virtuality and better personal interaction.

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Douglas Pritchard

Graduate Architect from the University of Manitoba
Visualization Consultant

Friday October 10, 2014, 2.30 p.m.
ZKM_Media Theater



BEYOND the Status Quo

Douglas Pritchard

Documentation of a Built Environment: Using Cutting-edge 3D Recording Technologies for the Precise Recording of Heritage Sites in Scotland.

The presentation focuses on the use of cutting-edge 3D documentation systems for recording unique architectural sites in Scotland or, more specifically, the remote birthplace of arctic explorer, John Rae, and the modernist home of Bernat Klein. The presentation outlines the rationale and methods required for documenting heritage sites and, above all, the advantages of using 3D laser scanning and other recording technologies for conservation, restoration and the development of a digital archive.



Prof. Dennis Del Favero

ARC Australian Professorial Fellow
Director, iCinema Research Centre
Deputy Director, National Institute for
Experimental Arts

Friday October 10, 2014, 3.05 p.m.
ZKM_Media Theater

BEYOND the Status Quo

Prof. Dennis Del Favero

Transactions in 3D Space: Database or Narrative Events?

While the enhancement of participatory 3D technologies over the last decade has converted viewers of information into producers of a digital world, less attention has been given to the role played by narrative in structuring our interactions with the digital. Based on recent 3D immersive visualization projects at iCinema Centre, University of New South Wales, this speech explores the emergence of entirely new types of encounters in 3D space that are more than database events and yet cannot be simply described reduced to the notion of narrative.



Prof. Dr. Vincent Heuveline

Director of the Computing Centre of the
University Heidelberg
Head of Engineering Mathematics and
Computing Lab (EMCL) University Heidel-
berg

Friday October 10, 2014, 3.50 p.m.
ZKM_Media Theater

BEYOND the Status Quo

Prof. Dr. Vincent Heuveline

Vincent Heuveline is Director of the Computing Centre of the University Heidelberg. He is full professor at the University Heidelberg where he is leading the Engineering Mathematics and Computing Lab (EMCL) under the roof of the Interdisciplinary Center for Scientific Computing (IWR). He is further Group Leader of the research group "Data Mining and Uncertainty Quantification" at the Heidelberg Institute for Theoretical Studies (HITS gGmbH).

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Prof. Frank Geßner

Professor for Theory and Practice of Visual
Arts at the Film University Babelsberg

Friday October 10, 2014, 4.20 p.m.
ZKM_Media Theater



BEYOND the Status Quo

Prof. Frank Geßner

ALIAS YEDERBECK – Expanded Animation Cinema

The polystylistic "Expanded Cinema Animation" ALIAS YEDERBECK combines elements of the visual arts with media art, film, video, animation, and sound in a large-scale cinematographic panorama installation. The hybrid artistic research project was recently released as a virtual/interactive panorama installation on DVD, at RE:VOIR Paris. The installation does not replica the original panorama, because the virtual 3D model is the cross-media interface for a planned ALIAS YEDERBECK_2.0 project. Additional information at: www.testefoundation.org

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D*Haus Architects

David Ben Grünberg - Daniel Woolfson
Architects, Web Designers, Artists and
Graphic Designers

Friday October 10, 2014, 4.50 p.m.
ZKM_Media Theater

D*HAUS

BEYOND the Status Quo

D*Haus Architects

The D*Haus

The D*Haus concept is capable of responding dynamically to its environment by controlled adaptation to seasonal, meteorological and astronomical conditions. The flexibility of the D*Haus allows adaptation from winter to summer, and from day to night by literally moving and unfolding itself like a Rubik's Cube. Interior walls become exterior walls, doors become windows and windows become doors. A house like this represents a unicum in the history of architecture, and we believe that creating buildings capable of adaptation and change would ensure a far more sustainable way of living.



Luis Perez –Bayas

Neuroscientist and Expert of
Brain-3D-Relations

Friday October 10, 2014, 5.25 p.m.
ZKM_ Media Theater

BEYOND the Status Quo

Luis Perez –Bayas

Emotions & 3D Stereoscopy (S3D) – Let it Be

The perception of audio-visual stereoscopic 3D space and one's own emotions is that they are intertwined and affect each other. When filming in S3D, one should take into account the depth cues and respect the consistency of, and between, the parameters and natural properties of both our spherical binocular visual system and our brain. This is essential for enabling the viewer to immerse himself in a unique and "non-contradictory" perceptual and emotional journey. S3D filmmaking thus requires a radical paradigm shift and the development of a new cinematographic language and spirit for actually making S3D come fully alive.



Philippe Jaulmes

Creator of the New Panrama Process

Friday October 10, 2014, 6 p.m.
ZKM_ Media Theater

BEYOND the Status Quo

Philippe Jaulmes

Panrama: The Image Becomes Space

As the first dome projection system ever to use a single film, PAN-RAMA fully envelopes spectators and takes them inside a frame-less image.

Once immersed within the image, the eye is then free and the entire surface of the retina is stimulated so as to proximate real visual perception. Consequently, the viewer has a unique perception of space and depth. By drawing on cutting-edge computer technologies, PANRAMA continues its research in small dome-screens, develops a specific film language, and carries out very promising experiments in stereoscopic 3D.

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Ina Conradi Chavez

Award-winning Digital Media Artist

Saturday October 11, 2014, 9 a.m.
ZKM_ Media Theater



BEYOND Sustainability

Ina Conradi Chavez

"Reanimated Painting"

By drawing on a range of cross-media, such as animation, 3D stereoscopy, film and music New Media artists are currently challenging the long-established premises of abstract painting. This presentation is a critical examination of experimental 3D stereo-animated films and immersive installations that have emerged from these new approaches. Further details at www.inacontradi.com

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Elke Reinhuber

Assistant Professor at
Nanyang University, Singapore

Saturday October 11, 2013, 9.30 a.m.
ZKM_ Media Theater



BEYOND Sustainability

Elke Reinhuber

Multithreaded Tales: Reconsidering Narrative Structures in a Post-linear Era

Based on her recent research on counterfactuals in media art, Elke Reinhuber explores the ways in which narrative structures may be fragmented and dissected by way of mobile forms of spectatorship. While narrative conventions allow for a plethora of stylistic storytelling devices, with the application of New Media (interactivity, 3D, split-screen, multi-screen, and recombination) and mobile devices (e.g. Augmented Reality), new possibilities are opened up for conveying to the audience multi-layered information at rational and emotional levels.



BEYOND Sustainability

Dr. Martina Mrongovius

Creative and Executive Director of the
"Center for the Holographic Arts"
(Holocenter)
Part-Time Assistant Professor at the
Academy of Media Arts, in Cologne

Saturday October 11, 2014, 10.05 a.m.
ZKM_Media Theater

Dr. Martina Mrongovius

Exploring Parallax on Governors Island

The Center for Holographic Arts established the Holocenter House on Governors Island, NYC. In addition to showing a gallery of holograms, we invited artists to create projection works based on the parallax concept. Furthermore, bi-weekly public weekend workshops were offered in collaboration with the New York Stereoscopic Society. The artists' approaches to the theme of parallax and the public's response to the workshops will be presented.



BEYOND Sustainability

Galina Mihaleva

Visiting Assistant Professor at the School
of Art, Design and Media at Nanyang Tech-
nological University

Saturday October 11, 2014, 10.40 a.m.
ZKM_Media Theater

Galina Mihaleva

Wearable Technology: Transformations and traditions

The focus of this presentation is primarily on understanding how the contemporary technological revolution is transforming the design process, from the role of designers to the wearers of smart fabric technologies, particularly as smart textiles and design relate to social behavior and personal identity. Since the late 20th century, designers, artists, chemists, and engineers have been experimenting with incorporating various technologies into textiles in order to enhance their functionality and aesthetic qualities.

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Gülşel Özkan

Founder of International Feminine Digital
Project ("Int-Fe-Di-Pro")
Director and Scriptwriter of Documenta-
ries and Feature Films

Saturday October 11, 2014, 11.15 a.m.
ZKM_Media Theater



BEYOND Sustainability

Gülşel Özkan

International Feminine Digital Project

Digital Technologies no longer favor the Male Body. Unfortunately, in many parts of the world this information has not yet arrived. In many cultures digital technologies are still associated with male dominance. The International Feminine Digital Project (Int-Fe-Di-Pro) helps women in the Middle East, Africa and Turkey access and use digital technologies.

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Tsitsi Dangarembga

Director of ICAPA
Director of the Institute of Creative Arts for
Progress at Africa Trust

Saturday October 11, 2014, 11.40 a.m.
ZKM_Media Theater



BEYOND Sustainability

Tsitsi Dangarembga

Writer, filmmaker, teacher and cultural activist, Tsitsi Dangarembga, lives in Harare, Zimbabwe, where she directs the Institute of Creative Arts for Progress at Africa Trust, which she founded in 2009. With Women Filmmakers of Zimbabwe, of which she is also director, she is currently working on several projects that address the question of the representation of women in media. As Director of ICAPA, Tsitsi is currently founding a multidisciplinary film and arts teaching institution in Harare designed to serve the Southern African region, and a Zimbabwean film fund designed as a model for other regional countries.



BEYOND Sustainability

Dipl. oec. Christoph Backes

Director of the Institute
for Thinking and Acting in a
Business-like Manner

Saturday October 11, 2014, 2 p.m.

ZKM_Media Theater

Dipl. oec. Christoph Backes

Business Planning or “Drop your Tools”

Creative industry companies and professions are currently enjoying a boom worldwide. According to a recent UNESCO report the market in so-called creative industries has doubled in volume over the past 10 years. It is becoming increasingly evident that alongside technological innovation, aesthetic, artistic and creative soft-innovations are beginning to occupy a central role. Alliteration enters sciences and politics: Richard Florida's famous 3 T's (technology, talent, tolerance) describe an economic paradigm shift. But what's next?



BEYOND Sustainability

Petra Fastermann

Author and Managing Director of
Fasterpoly GmbH, Krefeld

Saturday October 11, 2014, 2.30 p.m.

ZKM_Media Theater

Petra Fastermann

3D printing – What can we hope for and Expect in the future?

The Maker Movement has made major contributions to the self-realization of individuals. Using 3D printing, anyone can become both designer and inventor. This not only encourages creativity, but enables people to present, or even sell their own products, and to thus also become entrepreneurs. 3D printing in the medical sector is here to stay: hearing aids, dental and hip implants are becoming increasingly common. One day, 3D printing might even solve the problem of organ donation, namely, by 3D-printed organs produced from the patient's own stem cells.

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Prof. Markus Gross

Professor of Computer Science at the Swiss
Federal Institute of Technology Zurich (ETH)
Head of the Computer Graphics Laboratory
and the Director of Disney Research, Zurich

Saturday October 11, 2014, 3.05 p.m.

ZKM_Media Theater



BEYOND Sustainability

Prof. Markus Gross

A Glimpse behind the Scenes of Recent Research on Production and Post-production Techniques

With an experimental short film, “Lucid Dreams of Gabriel”, Disney Research demonstrates the latest special effects technologies for displaying the temporal dimension in film. Our new technique “The Flow of Time” includes global and local frame-rate variation, local pixel timing, local and global artistic shutter functions, local retiming and markups, and highly dynamic range imaging. The short film has been produced for showing TV program and filmmakers, novel and exciting opportunities for future production.

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Prof. Dr. Mark Post

Professor and Vice-Dean at Eindhoven
University of Technology and Maastricht
Chair of the Psychology Department at
Maastricht University
Medical Doctor

Saturday October 11, 2014, 3.40 p.m.

ZKM_Media Theater



BEYOND Sustainability

Prof. Dr. Mark Post

The Prospect of Cultured Beef

Cultured beef, or in vitro meat, has stirred a much-needed debate on the extent to which we intend to go with technology as a means of changing our lives. More specifically, discussion on food innovation evokes the kinds of emotion that provide unique insight into what meat means for us as individuals and for society as a whole. The adaptability of our concept of meat is even more interesting: How would things look if meat were no longer a product that necessitated the killing of animals? What if it were possible to avert the health risks linked to beef, and one could choose from hitherto unknown meat products?



BEYOND Sustainability

André S. Brössel

Founder and Director of
"Rawlemon Solar Architecture"
(Rawlemon, Ltd)

Saturday October 11, 2014, 4.25 p.m.

ZKM_Media Theater

André S. Brössel

We have developed the first solar concentration technology for the full building integration on any inclined surface. Rather than moving heavy panels, collectors or tons of mirrors with an enormous tracking system in order to capture the sun's path, this new mechanism is capable of capturing sunlight from any point in the sky by using a small tracking system, which generates more electricity and thermal energy with the same amount of sun. This is achieved by means of the simple geometry and light-focusing properties of a glass sphere. The idea is so simple and effective that it has prompted us to rethink the more classical forms with which our society produces energy.



BEYOND Sustainability

Prof. Dr. Michael Braungart

Founder and Scientific CEO of EPEA Internationale
Umweltforschung GmbH, Hamburg; Co-Founder
and Scientific Head of McDonough Braungart
Design Chemistry (MBDC), Charlottesville, Virginia
(USA), and Hamburger Umweltinstitut, Hamburg.

Saturday October 11, 2014, 5.15 p.m.

ZKM_Media Theater

Prof. Dr. Michael Braungart

Cradle to Cradle® - Beyond sustainability

Imagine a world without environmental pollution or waste, a world in which only products with materials beneficial to both man and the environment are manufactured. A world in which materials are of such high value that they flow in specially designed material cycles; a world in which humans can actually be pleased about the benefits their consumption has on the environment; a world in which humans are not obliged to save, reduce, and cut down on certain things for the sake of the environment. This is exactly the kind of world that the Cradle to Cradle® design concept opens up to all of us.

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Lorenzstraße 16

76135 Karlsruhe





We welcome you to BEYOND 2014! The BEYOND-Team: Stefanija, Nina, Stefanie, Daniel, Dana, Sebastian

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3D-Symposium BEYOND

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