

# ***DAS DIGITALE BILD - PERSPEKTIVEN IM METAVERSE***



**/ON-  
LINE  
04.11.22**



# Das digitale Bild – Perspektiven im Metaverse

online  
04.11.22

Mit Beiträgen von:  
**David Chalmers**  
**Gundolf Freyermuth**  
**Dietmar Laß**  
**Anika Meier**  
**Manuel Rossner**  
**Holger Simon**  
**Martin Warnke**



**Friday, 04 Nov 2022**

<b>11:00–12:00 (CET)</b>	<b>The Metaverse. Visual spaces as places of digital communication</b> Holger Simon (University of Cologne) <i>Introduction: Hubertus Kohle (Ludwig Maximilian University of Munich)</i> <i>Moderation: Hubert Locher (University of Marburg)</i>
<b>12:00–13:00 (CET)</b>	<b>Vision, technologies and applications of the Metaverse from an applied research perspective</b> Dietmar Laß (Fraunhofer ICT Group) <i>Moderation: Luca Beisel (Freie Universität Berlin)</i>
<b>13:00–14:00 (CET)</b>	<b>Break</b>
<b>14:00–15:00 (CET)</b>	<b>The Sensorium of a Metaverse: from the ear to the eye to the body</b> Martin Warnke (Leuphana University Lüneburg) <i>Moderation: Martin Langner (University of Göttingen)</i>
<b>15:00–16:00 (CET)</b>	<b>Please Do Touch the Art: Experiencing Art in the Metaverse</b> Anika Meier (Art scholar) und Manuel Rossner (Artist) <i>Moderation: Moritz Queisner (Karlsruhe University of Arts and Design)</i>
<b>16:00–17:00 (CET)</b>	<b>Break</b>
<b>17:00–18:00 (CET)</b>	<b>Meaning and value in the metaverse</b> David Chalmers (New York University) <i>Moderation: Julian Stalter (Ludwig Maximilian University of Munich)</i>
<b>18:00–19:00 (CET)</b>	<b>Utopian Audio Visions: from the Pre-Industrial Gesamtkunstwerk to the Digital Metaverse</b> Gundolf S. Freyermuth (TH Köln – University of Applied Sciences, Cologne Game Lab) <i>Moderation: Christoph Bareither (University of Tübingen)</i>
<b>19:00–19:30 (CET)</b>	<b>Final discussion</b>

# Das digitale Bild – Perspektiven im Metaverse

online  
04.11.22

Mit Beiträgen von:  
**David Chalmers**  
**Gundolf Freyermuth**  
**Dietmar Laß**  
**Anika Meier**  
**Manuel Rossner**  
**Holger Simon**  
**Martin Warnke**



**Holger Simon:**

## **The Metaverse. Visual spaces as places of digital communication**

The metaverse represents a new quality of the Internet, based on the old experience that we humans can encounter each other simultaneously in places. The success of the „old“ Internet is based primarily on asynchrony. Today, due to the expansion of the broadband network and the technical innovations of visual media in the last decade, new places are emerging where we can meet other people, experience new worlds together, and share experiences together. In my talk I will discuss the conditions of the metaverse as visual spaces of digital communication and combine them with the crucial call that especially art, culture and science should tap into these spaces early and not leave them to the GAFA platforms. For only in the metaverse can we reach places we can't get to in real life, but where we can anticipate and experience new worlds.

*The presentation will be held in German.*

## **Dietmar Laß: Vision, technologies and applications of the Metaverse from an applied research perspective**

At the latest since Mark Zuckerberg renamed his social media company Facebook to Meta, the topic of the Metaverse has received increased attention. Microsoft, Amazon, Apple and Google also hold important technology components for the Metaverse in their portfolios. Nvidia is aiming for a collaboration platform in a virtual 3D world for the Industrial Metaverse with „Omniverse“.

The „Metaverse“ describes a virtual world with digital avatars and virtual objects that has a connection to the physical-analog world. It is the potential Internet design of the future: this 3D Internet can be viewed, entered as well as experienced by means of data glasses and extended reality technologies, thus enabling seamless interaction between the digital and analog worlds.

# **Das digitale Bild – Perspektiven im Metaverse**

online  
04.11.22

Mit Beiträgen von:  
**David Chalmers**  
**Gundolf Freyermuth**  
**Dietmar Laß**  
**Anika Meier**  
**Manuel Rossner**  
**Holger Simon**  
**Martin Warnke**

The Fraunhofer Gesellschaft is not only a technology supplier, but also a thought leader and agenda setter. We closely observe and classify trend topics such as Metaverse. Almost all institutes of the Fraunhofer ICT Group are working on technologies that are relevant in the field of metaverse. The hype around the metaverse acts as a catalyst for technology development. The focus at Fraunhofer is on technologies and business applications in the sense of an „industrial metaverse“. Technologies relate to access technologies such as data glasses, wearables, display technologies, software (engines, rendering, AI, simulation/modeling), interoperable data platforms, and content such as 3D, moving images, avatars. To realize the metaverse, other technologies are needed, e.g., to ensure appropriate connectivity and computing power at the user's end. Finally, the metaverse needs framework technologies from the area of security, standards and contracts (keyword: blockchain).

The application areas of the metaverse are diverse and range from use cases in gaming, finance, tourism, education, marketing, culture/arts, to industrial applications in medicine, manufacturing, logistics, and so on. The dissemination ultimately depends on the benefit of the use case scenarios for the user. Fraunhofer is realizing the first applications in the cultural and industrial sectors: with so-called holodeck events, the Internet becomes „walkable“ and enables unlimited experiences that are difficult or impossible in reality. Through the 3D reconstruction of historical cultural sites, informative „time travel“ can be experienced - without tourist damage on site. Several Fraunhofer institutes are working on corresponding digital cultural heritage projects.

*The presentation will be held in German.*

# Das digitale Bild – Perspektiven im Metaverse

online  
04.11.22

Mit Beiträgen von:

**David Chalmers**  
**Gundolf Freyermuth**  
**Dietmar Laß**  
**Anika Meier**  
**Manuel Rossner**  
**Holger Simon**  
**Martin Warnke**



**Martin Warnke:**

## **The Sensorium of a Metaverse: from the ear to the eye to the body**

Already in 1965 Ivan Sutherland described an „Ultimate Display“ as a „looking glass into a mathematical wonderland“, which we nowadays call „Augmented Reality“. It was the prelude to the technology of virtual reality, which you can immerse yourself in with VR goggles and a data glove. Neil Stephenson, in Snow Crash 1992, named such worlds as metaverse. Finally, in our days, Mark Zuckerberg wants to bring us all into his metaverse to become even immeasurably richer than he already is. But what has become public of his plans borders on the ridiculous. Little figures without abdomens are hopping through environments in which not even their developers might be. So this can't be the last word. It may be useful to take a look at the trends that are emerging for the world relationship of us users. And these include high-resolution displays, speech recognition and synthesis, and a veritable flood of sensors that bring us very close to our bodies. Data visualizations, as well as haptic and acoustic stimuli, are superimposed on our perception, although it is by no means clear whether the medium of an immersive spatial illusion, as in the Metaverse, will be the focal point of development. For the abstraction from four-dimensional space-time to the surface can hardly be underestimated in its importance, as Sybille Krämer has pointed out to us, and art history also knows how important it is.

These are all reasons to doubt the immediate triumph of the metaverse.

*The presentation will be held in German.*



# Das digitale Bild – Perspektiven im Metaverse

online  
04.11.22

Mit Beiträgen von:  
**David Chalmers**  
**Gundolf Freyermuth**  
**Dietmar Laß**  
**Anika Meier**  
**Manuel Rossner**  
**Holger Simon**  
**Martin Warnke**



**Anika Meier und Manuel Rossner:**

## **Please Do Touch the Art: Experiencing Art in the Metaverse**

In the digital realm, the boundaries between painting and sculpture begin to blur. Things that are impossible in physical space become possible in the digital environment, the so-called Metaverse. Rules that normally apply in exhibition spaces are suspended in digital environments. Whereas visitors are typically warned not to touch artworks, they are now asked to „please interact.“

The development of virtual worlds will be explored by artist Manuel Rossner and curator Anika Meier from an artistic and curatorial standpoint. They will highlight how blockchain, virtual reality, and gaming could influence how the internet evolves in the future. They will paint a concise picture of art in the metaverse using examples from Rossner's work and significant pieces of art from recent decades.

*The presentation will be held in English.*

## **David Chalmers: Meaning and value in the metaverse**

Can one lead a meaningful or valuable life in a virtual world?  
I'll argue that one can, though I'll also discuss some obstacles.

*The presentation will be held in English.*

# Das digitale Bild – Perspektiven im Metaverse

online  
04.11.22

Mit Beiträgen von:

**David Chalmers**  
**Gundolf Freyermuth**  
**Dietmar Laß**  
**Anika Meier**  
**Manuel Rossner**  
**Holger Simon**  
**Martin Warnke**



## **Gundolf S. Freyermuth: Utopian Audio Visions: from the Pre-Industrial Gesamtkunstwerk to the Digital Metaverse**

From a decades-old and moderately popular science fiction dystopia, the “metaverse” recently evolved into the technological and economic master plan of global high-tech corporations such as Meta (formerly Facebook), Microsoft, Nvidia, and Epic Games. They have invested billions in an effort to integrate virtuality and reality into a persistent “new world” for entertainment and work. Historically, the metaverse concept emerged at the intersection of three intertwined developments. First, since the dawn of the modern era in Western culture, secular futures and, in particular, new ways of living and the social structures and technologies that make them possible have been envisioned and anticipated in an accumulating number of media. Secondly, existing media have also constantly imagined entirely new media, above all immersive audio-visuals, beginning in modern times with the longing for the ‘Gesamtkunstwerk,’ the total work of art. Thirdly, the most popular of these imaginary media—whether technologically possible or impossible—have been pursued sooner or later in practice, i.e., they became an aesthetic ideal for artists and not infrequently also the guiding principle for the actions of scientists, engineers, and entrepreneurs. In my presentation, I will situate the metaverse and its constitutive components in the modern process of inventing, within media, the future in general, as well as future media. Special attention will be paid to the metaverse’s relationship to two other digital media utopias, namely “cyberspace” and the “holodeck.”

*The presentation will be held in English.*

# **Das digitale Bild – Perspektiven im Metaverse**

online  
04.11.22

Mit Beiträgen von:  
**David Chalmers**  
**Gundolf Freyermuth**  
**Dietmar Laß**  
**Anika Meier**  
**Manuel Rossner**  
**Holger Simon**  
**Martin Warnke**



## **Zoom access data**

**Nov. 4, 2022 11:00 AM** (Amsterdam, Berlin, Rome, Stockholm, Vienna)

## **Please register at:**

[https://lmu-munich.zoom.us/meeting/register/tJwlcO-qrjMiGdZUTS\\_cUID042VOZduWFfNa](https://lmu-munich.zoom.us/meeting/register/tJwlcO-qrjMiGdZUTS_cUID042VOZduWFfNa)

## **Contact Information**

### **Coordination:**

**Julian Stalter**

Mobilnummer: 0176 80759166

**Sophie Ramm**

Mobilnummer: 0174 9620228

**Leonie Groblewski**

Mobilnummer: 0157 50184171

### **General Questions:**

[dasdigitalebild@kunstgeschichte.uni-muenchen.de](mailto:dasdigitalebild@kunstgeschichte.uni-muenchen.de)