

# "Metaverse" - Psychologische Folgen


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Psychologie intelligenter interaktiver Systeme

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Julius-Maximilians-Universität Würzburg

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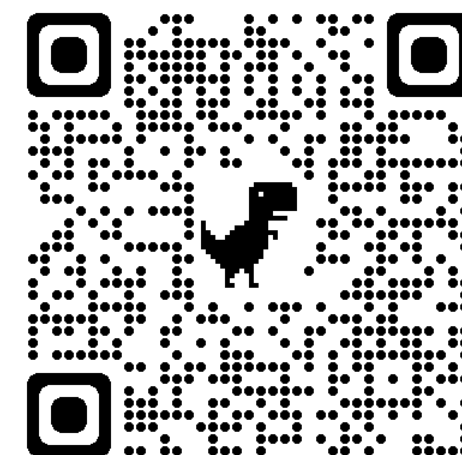
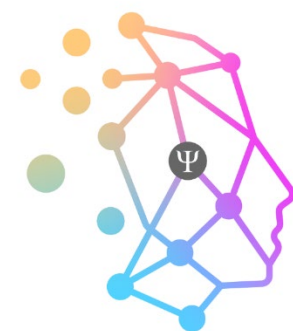
Deutscher Ethikrat 

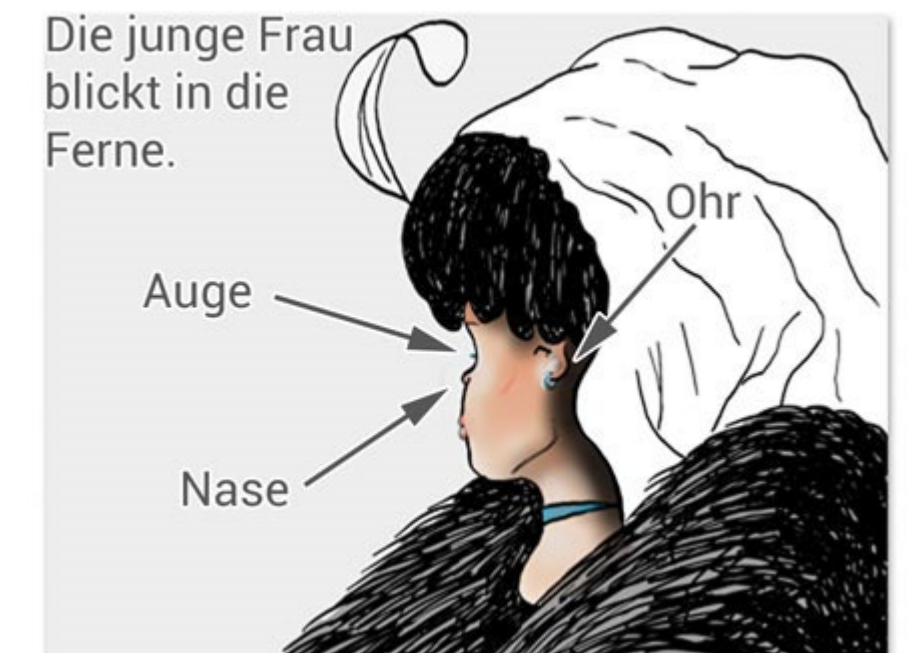
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ÖFFENTLICHE TAGUNG

Lost in „Metaverse“? Zur Verschränkung realer und digitaler Welten

15. November 2023, 10:00 Uhr  
Kaisersaal, Futterstraße 15/16, 99084 Erfurt





<https://www.brillen-sehhilfen.de/optische-tauschungen/images/alte-oder-junge-frau-kippbild.jpg>





# "Metaverse" - **not** just another thing?

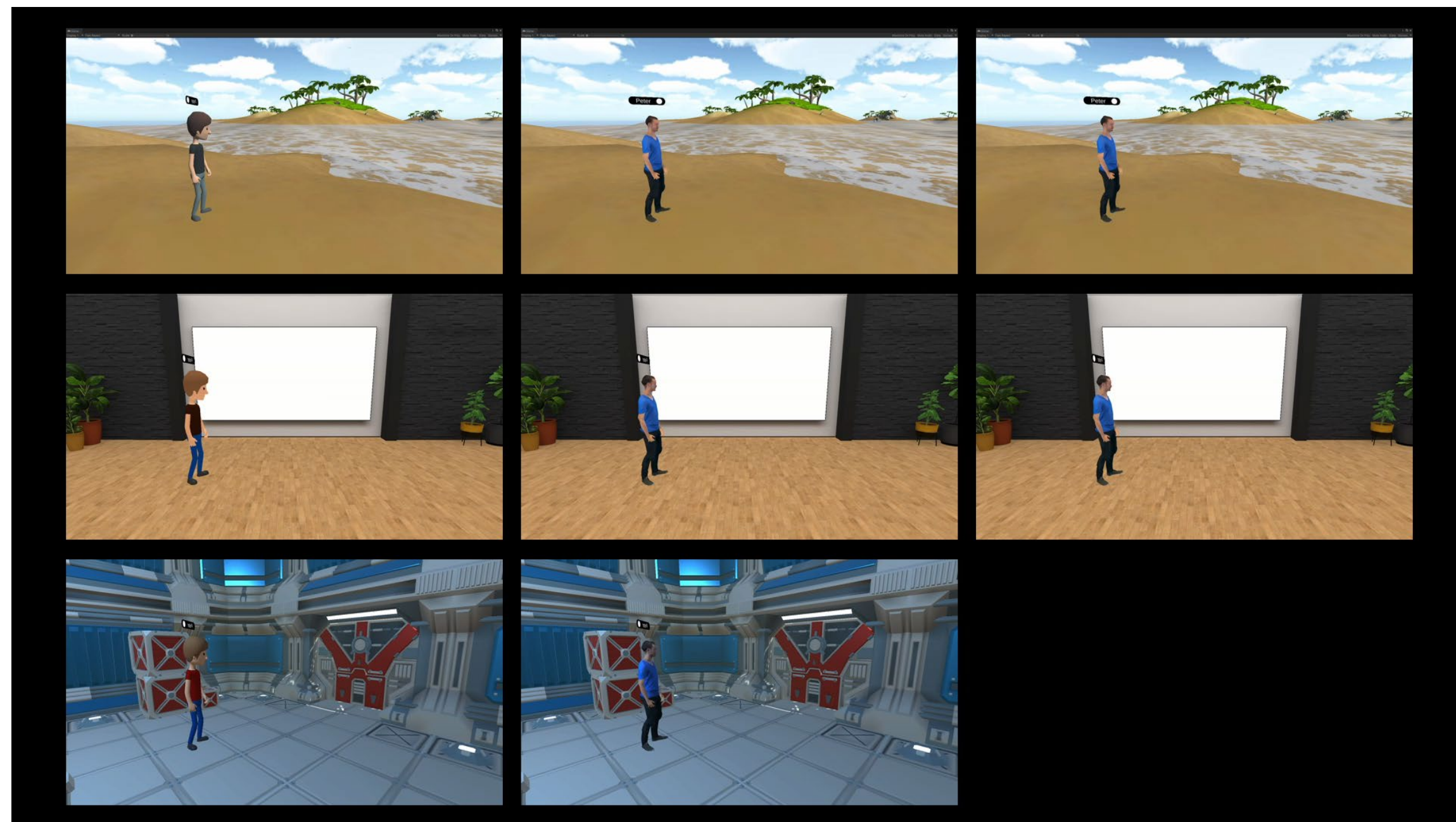
"Seeing is Believing" | "Sensing is Believing"

Immersion | Presence (e.g., Slater, 2018)

Congruency | Plausibility

(e.g., Skarbez, 2016; Skarbez, Smith, & Whitton, 2021; Wienrich, Komma, Vogt, Latoschik, 2021; Wienrich & Latoschik, 2022)





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# "Metaverse" - **not** just another thing?

"Everywhere in the world, self starts with body" (Baumeister, 1999, p.2)

Embodied Cognition (e.g., Dourish, 2004)

Virtual Body Ownership | Social Presence

(e.g., Gallagher, 2000; Maister, 2014; Biocca, Harms, & Burgoon, 2003)



unathletic

normal

athletic



Kocur et al., 2020

# "Metaverse" – Self Perception

## Proteus Effect

(e.g., Ratan et al., 2020; Yee and Bailenson, 2007;

(Studies: Kocur, Kloss, Schwind, Wolff, & Henze, 2020; Döllinger, Wienrich, Latoschik, 2019; Döllinger, Wienrich, Latoschik, 2021; Döllinger, Wolf, Mal, Wienrich, Latoschik, 2022; Wolf, Mal, ... Latoschik, Wienrich, 2022; Keppler, Döllinger, Wienrich, Latoschik, Israel, 2021; Wolf, Döllinger, Mal, Wienrich, Botsch, & Latoschik, 2020; Wolf, Fiedler, Döllinger, Wienrich, & Latoschik, 2022; Wolf, ... Wienrich, Botsch, & Latoschik, 2021)



ARD, 2023  
Univ. Würzburg  
Project ViTraS





[https://finthinkers.files.wordpress.com/2017/12/smartphone-1618909\\_1280.jpg?w=1200](https://finthinkers.files.wordpress.com/2017/12/smartphone-1618909_1280.jpg?w=1200)

# "Metaverse" – Other Perception

## VR as Empathy Machine

(e.g., Brydon et al, 2021; Lara et al. 2021; Martingano et al., 2021; Ventura et al., 2020)

## Witnesses

(e.g., Jewish Museum)

## Embodied AI Interaction

(e.g., Wienrich & Latoschik, 2021; Wienrich, Carolus, & Latoschik, 2023)





[https://www.youtube.com/watch?v=c7x0\\_6YR6y4](https://www.youtube.com/watch?v=c7x0_6YR6y4)

# "Metaverse" – Other Perception

## VR as Empathy Machine

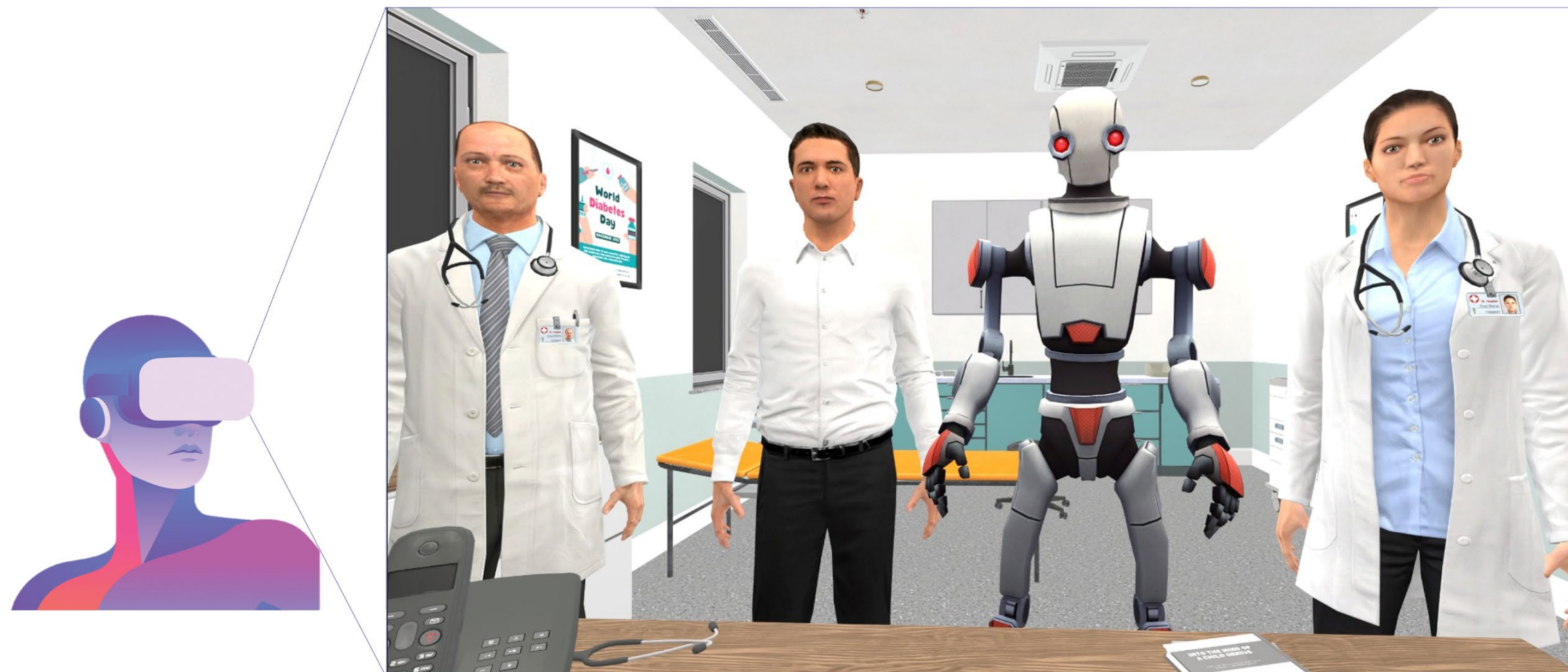
(e.g., Brydon et al, 2021; Lara et al. 2021; Martingano et al., 2021; Ventura et al., 2020)

## Witnesses

(e.g., Jewish Museum Chicago)

## Embodied AI Interaction

(e.g., Wienrich & Latoschik, 2021; Wienrich, Carolus, & Latoschik, 2023)



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# "Metaverse" – Other Perception

## VR as Empathy Machine

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## Embodied AI Interaction

(e.g., Wienrich & Latoschik, 2021; Wienrich, Carolus, & Latoschik, 2023)





<https://static01.nyt.com/images/2017/09/15/business/15upload1/15upload1-superJumbo.jpg?quality=75&auto=webp>

## "Metaverse" - Risks

Discrimination, bullying, violence, sexual harassment, ... (e.g., Hinduja, 2023; Schulenberg, ... & Barulor, 2023)

Authenticity of interaction partners

(e.g., Rack, Hotho, Latoschik, 2022; Lin, Cronjé, Wienrich, Pauli, & Latoschik, 2023)

360° tracking, existence after death, addiction, depersonalization, ...

(e.g., Barreda-Ángeles & Hartmann, 2022; Paal, 2022)





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University Würzburg | Lin et. al, 2023

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<https://cdn.vectorstock.com/i/preview-1x/52/10/protection-of-personal-space-from-strangers-vector-44725210.jpg>

# "Metaverse" – Counteracting Risks

## Save Spaces, ...

(e.g., Hinduja, 2023; Schulenberg, Freeman, Li, & Barulor, 2023)

## Biometric Identification

(e.g., Rack, Hotho, & Latoschik, 2022; Rack, Kobs, Fernando, Hotho, & Latoschik, 2023; Lin, Cronjé, Wienrich, Pauli, & Latoschik, 2023)

...





Universität Würzburg | Lin et. al, 2023

# "Metaverse" – Counteracting Risks

## Save Spaces, ...

(e.g., Hinduja, 2023; Kremer 2022)

## Biometric Identification

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...



# "Metaverse" - **not** just another thing!

The "metaverse" is **real**.

It offers diverse potential and risks.

**We** create the "metaverse".



[https://www.ndr.de/nachrichten/info/diversity234\\_v-fullhd.jpg](https://www.ndr.de/nachrichten/info/diversity234_v-fullhd.jpg)



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