

FRAUNHOFER HEINRICH HERTZ INSTITUTE

PRESS RELEASE

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Fraunhofer HHI shows new Virtual Reality application at IBC

With the technology "3D Human Body Reconstruction (3DHBR)" of the Fraunhofer Heinrich Hertz Institute HHI, the realistic, three-dimensional portrayal of a person can be integrated into a virtual world. Together with production companies such as UFA, Trotzkind and Triad, Fraunhofer HHI has done several interactive VR productions that impressively demonstrate the potential of this new VR technology. The technology can be experienced live at IBC in Amsterdam (Hall 8, Booth B80) from September 15 to 19.



Virtual Reality: 3D Human Body Reconstruction, a Fraunhofer HHI technology, digitizes people

Fraunhofer HHI's innovative reconstruction process makes it possible to generate natural-seeming, dynamic 3D models of people, the effects of which – in terms of authenticity and realism – far exceed conventional animations of virtual characters. The 3D models are created based on a large number of different video perspectives, thus accurately reconstructing gestures, facial expressions and textures (skin, hair and fabric) and making it possible to realistically reflect even facial movements and moving clothing.

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The 3D models of the people are then integrated into a virtual scene. This gives viewers the option to observe the virtualized people with Virtual Reality glasses at very close range and from different angles. This technology allows viewers to immerse themselves directly in the scene and experience the story close up. They encounter a totally new type of immersion and virtual sensation.

Some applications enable viewers not only to move around freely within the scene, but also to use a hand controller, serving as an illuminant (e. g. a torch) in the virtual world, to change the level of lighting in the scene interactively. By using it, users can go on a discovery tour within the scene.

Innovations for the digital society of the future are the focus of research and development work at the **Fraunhofer Heinrich Hertz Institute HHI**. In this area, Fraunhofer HHI is a world leader in the development for mobile and optical communication networks and systems as well as processing and coding of video signals. Together with international partners from research and industry, Fraunhofer HHI works in the whole spectrum of digital infrastructure – from fundamental research to the development of prototypes and solutions. www.hhi.fraunhofer.de

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Press Contact: **Anne Rommel** | anne.rommel@hhi.fraunhofer.de | phone +49 30 31002 353

Technical Contact: **Oliver Schreer** | oliver.schreer@hhi.fraunhofer.de | phone +49 30 31002 620

Technical Contact: **Ingo Feldmann** | ingo.feldmann@hhi.fraunhofer.de | phone +49 30 31002 290