

PRESS RELEASE

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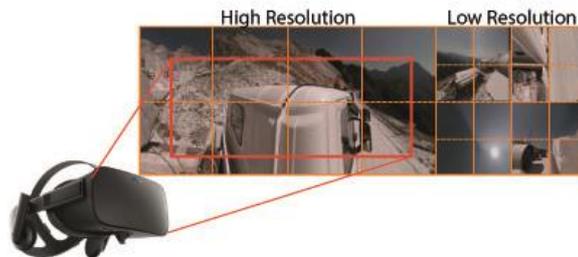
Fraunhofer HHI at Mobile World Congress with VR and 5G technologies

At the GSMA Mobile World Congress 2017 in Barcelona, Fraunhofer Heinrich Hertz Institute's wireless and video coding experts present their latest developments. Visit us at Fraunhofer Booth 7G31 in Hall 7 during February 27 and March 2.

You find the following highlights at our booth 7G31:

Tile Based DASH Streaming for Virtual Reality with HEVC – Enabler for high quality 360 degree video

Only high resolution content can give a sense of immersion in VR video applications, but the large amount of data poses a challenge to common transport systems and decoders. Tile based DASH streaming with lightweight HEVC Tile Aggregation allows to easily adapt the 360 degree video data stream to the current user viewport. This technology allows reducing throughput and decoder requirements significantly without complex transcoding.



5G: mobile networks of the next generation

The fifth-generation mobile network assumes a key position in the communication landscape of the future. Autonomous driving, Industry 4.0, the Internet of Things, and the tactile Internet for wireless object control in real time require a quantum leap in efficiency, the scope of performance and the availability of mobile communication networks. The new 5G wireless communication technology will be the basis for the



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digital infrastructure of the future. The industry plans to deploy the first 5G-capable networks starting in 2020. In a consortium with manufacturers, network operators, users and research institutions Fraunhofer HHI will realize prototypes of the communication technology infrastructure for 5G early on, allowing it to be experienced in the 5G testbed of Berlin.

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At Mobile World Congress in Barcelona, Fraunhofer HHI presents the following 5G technologies:

- Millimeter wave technology
- Active antenna arrays for massive MIMO signal processing
- Quadriga: 3D/4D quasi-deterministic channel mode

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

The Fraunhofer-Gesellschaft is the leading organization for applied research in Europe. Its research activities are conducted by 69 Fraunhofer Institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of some 24,500, who work with an annual research budget totaling 2.1 billion euros. Of this sum, 1.9 billion euros is generated through contract research. More than 70 percent of the Fraunhofer-Gesellschaft's contract research revenue is derived from contracts with industry and from publicly financed research projects. International collaborations with excellent research partners and innovative companies around the world ensure direct access to regions of the greatest importance to present and future scientific progress and economic development.

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

Technical Contact video coding: **Robert Skupin** | robert.skupin@hhi.fraunhofer.de | phone +49 30 31002 185

Technical Contact 5G: **Slawomir Stanczak** | slawomir.stanczak@hhi.fraunhofer.de | phone +49 30 31002 875