

FRAUNHOFER HEINRICH HERTZ INSTITUTE

PRESS RELEASE

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In the middle of the action at Konzerthaus Berlin – with the OmniCam-360

ARTE Concert is bringing the orchestra to your living room starting on March 13. The audience will be able to experience Beethoven's Fifth from the standpoint of the orchestra, while sitting on its couch at home and with a spectacular, interactive 360 degree perspective. These panorama recordings are made possible by the OmniCam-360 developed by the Fraunhofer Heinrich Hertz Institute HHI.

Concert revolution in Berlin. The idea is both simple and brilliant: The orchestra doesn't sit on the stage as usual, but spread out on the parquet – and with the audience right among them. A direct listening experience, offered to fans of classical music by Iván Fischer, who invented this concept and is the Chief Conductor of the Konzerthausorchester Berlin. This allows the audience to experience the special atmosphere which develops between the orchestra and the conductor during the concert.

ARTE Concert is now bringing this up close and personal experience online – and interactively at that. Not only can the users select from five different camera perspectives, they can also enjoy a spectacular 360 degree panorama view of the orchestra in UHD resolution. They are their own stage director and can switch among different perspectives while the Konzerthausorchester plays Beethoven's famous Fifth Symphony.

This is possible thanks to the compact OmniCam-360 from the Fraunhofer HHI. The camera system consists of ten HD cameras mounted underneath a system of mirrors. The resulting individual images are corrected in real time and combined to create a parallax free UHD panorama video with a resolution of approx. 10,000 by 2,000 pixels. The OmniCam-360 measures approx. 50 by 50 centimetres and weighs 15 kilograms.

Thanks to this recording technology, the audience can position themselves among the violins or next to the clarinets, watch the timbales reverberate or listen to the chirping of the piccolo flute. In addition to the panorama view, this impressive concert experience also includes the sound. The viewer's perspective changes not just visually, but also audibly. The user hears the instruments closest to where he is virtually sitting more loudly.

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The concert was recorded with an eight-channel microphone array by the Fraunhofer HHI, in order to be able to reproduce this sound pattern as realistically as possible. So watch out for the fanfares of the trumpets in the 4th movement!

The 360 degree concert experience "Mittendrin" is available starting on Sunday, 13 March 2016 at concert.arte.tv/de/mittendrin. The regular concert recording can also be viewed on ARTE on Sunday, 13 March 2016 at 00:20 am.

ARTE launched the live streaming and video-on-demand offering **ARTE CONCERT** (concert.arte.tv) seven years ago and now features 900 concert highlights a year, of which 450 are live. Extensive additional material such as interviews, online documentaries or photo essays also allows users to get a look behind the scenes. ARTE CONCERT can be accessed from all internet-capable devices: with a computer or notebook as well as the mobile website or via the ARTE APP on smartphones or tablets.

The **Fraunhofer Heinrich Hertz Institute** is a world leader in the development of mobile and fixed broadband communication networks and multimedia systems. From photonic components and systems through fiber optic sensor systems to video coding and transmission, the Fraunhofer HHI works together with its international partners from research and industry. www.hhi.fraunhofer.de

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