

Fraunhofer IIS Presents: Cutting-edge Technologies and Grammy-winning Sounds at NAB in Las Vegas



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Fraunhofer IIS at NAB 2022 in Las Vegas

From April 23-27, Las Vegas will be all about broadcasting and streaming. In the three years that have passed since the last NAB show, some impressive innovations have been launched that are just waiting to be discovered by the public. Needless to say, we are also ready and eager to showcase our cutting-edge technologies. Experience at booth C3926 how our research improves production and broadcast of media content all over the world. In addition to LC3/LC3plus and xHE-AAC, Fraunhofer IIS will also showcase the application of Next Generation Audio with MPEG-H, Cingo, and S-ADM.

MPEG-H Audio, Cingo, and S-ADM: The Best in Next Generation Audio

MPEG-H Audio is the benchmark when it comes to immersive sound that can be personalized. Impressive proof for this is that it was selected as the only mandatory audio codec for the future terrestrial UHD system in Brazil. In addition to convincing demo material of successful trials around the globe, we will show the transmission of MPEG-H Audio via the metadata format S-ADM and the new SMPTE ST 2110-41 Standard using Ateme's TITAN Live encoder as an example. On the playback side, thanks to Fraunhofer Cingo, immersive sound can be experienced on almost any smartphone or tablet via headphones and even with built-in stereo speakers.

MPEG-H also unlocks new dimensions in the field of music streaming. Immersive sound is gradually establishing itself on the global market. As the basis of Sony 360 Reality Audio, MPEG-H Audio is at the heart of the immersive experience offered by a number of popular music streaming services such as Deezer, Amazon Music, nugs.net, and Tidal. Now, Fraunhofer IIS demonstrates the next innovation for streaming services: In the mH-ii App by our partner MediaHyperium, individual sound elements can be easily adjusted to personal

taste. Experience content from the recent Grammy-winning album “Divine Tides” by Steward Copeland and Ricky Kej as envisioned by the artists.

In addition to these innovations, Fraunhofer IIS will present further technologies for the enhancement of audio infrastructures and content:

xHE-AAC: Netflix’s First Choice for Adaptive AV Streaming and the Standard for Digital Radio

xHE-AAC is the codec for all signal types – whether audio or video streaming services, music, audiobooks, or podcasts. Our technology puts interruptions and buffering in audio and video streams to an end. xHE-AAC offers maximum coding efficiency with a stereo bitrate range from 12 kbit/s to 500 kbit/s and higher. Combined with seamless bitrate adjustment via DASH and HLS, and obligatory MPEG-D DRC volume and dynamic range adjustment, xHE-AAC provides the best user experience for any content and any surrounding.

LC3/LC3plus: High-quality Audio for the Entire Communications Ecosystem

By reducing the required bit rate by about 50 percent compared to older codecs, LC3 and LC3plus enable energy-saving services that result in longer battery life. With LC3plus’s high resolution mode, audiophile music streaming services can be used. The LC3 and LC3plus audio codecs are specifically designed for wireless communication platforms such as Bluetooth and DECT (Digital Enhanced Cordless Telecommunications).

Book an appointment with our audio experts [here](#) or just stop by our booth C3926. We are looking forward to your visit!

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Link: <https://www.audioblog.iis.fraunhofer.com/nab-2022-las-vegas>