

## **Immersive Audio Podcast Workshop at the Nuremberg Digital Festival**

During the [Nuremberg Digital Festival](#), which took place from July 12 - 22, Dolby hosted an [immersive audio podcast workshop](#) at the Dolby Nuremberg office.

The topic of discussion was: Can immersive audio technologies add value to the medium podcast, and how?

Immersive audio uses what is known as “binaural audio technology.” This makes it possible to create a virtual acoustic scene via headphones. Unlike traditional stereophony today, where sound sources are always perceived “in the head,” sounds with binaural audio technology can also be placed outside the head. For example, the listener suddenly finds herself in the middle of the jungle with birds fluttering above, when a lion suddenly sneaks up from behind, roars, and chases a bunch of monkeys that run off screaming.

In order to find out how this might work in reality, and if there really is a value-add for the listener, we decided to conduct an experiment. Following a short technical talk about the idea of Dolby Atmos, the workshop participants were provided with audio production tools, a recording facility, audio material, as well as a sound and effects library.

The participants were a very diverse group from podcast novices to Germany’s probably best-known marketing podcaster [Alex Wunschel](#). This made for both a steep learning curve and a productive working environment over the course of the two-and-a-half-hour production session.

The participants were highly enthusiastic about the concept of spatial audio reproduction on headphones, although for the majority this workshop was their first encounter with binaural audio.

The audience was divided into groups and presented with a scripted, pre-produced podcast piece in an open Pro Tools session. Two groups were asked to produce additional audio content using a 3D microphone and other recording gear. Two other groups were given time to mix everything in Dolby Atmos immersive audio mixes, which were consecutively turned back into stereo mixes. Thus, the output produced were two creatively independent binaural versions of the pre-production material, together with the corresponding stereo downmixes, that were later used for comparison and evaluation (still ongoing).

We were interested in new ideas, so we encouraged people to go crazy and really experiment with the equipment.

The resulting podcasts were then played back and discussed. There will be more detailed results after the evaluation.

Gerald Moser, Sr Engineering Operations & Business at Dolby, had this to say:

“As an initial reaction, we can already confirm a few assumptions. For one, the concept of spatial audio is enthusiastically perceived by individuals as providing value to the medium of podcasts; the higher the level of professionalism, the higher the willingness of an exploratory approach towards the matter.

Second, binaural audio offers a wide creative potential which requires exploration and consequently a learning curve for the particular medium of podcasts. The good news here is the vast crowd of natural enthusiasts and creatives in that area, which Dolby as a company could leverage to facilitate these learnings to happen.”

The workshop proved to be very successful, according to the participants’ initial feedback, and gathered creative minds from students and academics to professional partners and media enthusiasts. One participant shared: “Terrific, thanks again for the cool workshop – for me the best of all events I participated at the Nuremberg Digital Festival.”

The evaluation of the results is still ongoing. If you are interested to participate, please reach out

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