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Titel:

Tools for the production of spatial audio within BINCI

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Abstract:

With the rise and propagation of virtual reality (VR) devices for consumer-grade applications, such as cost-effective head-mounted displays (HMDs), the interest and demand for 3D audio formats and spatial audio content has grown. Nonetheless, very few tools exist which enable sound engineers and other members of the creative community to produce spatial audio content for 3D applications in high quality using established workflows and software tools. The EC-funded research project Binaural Tools for the Creative Industries (BINCI) aims to develop user-friendly tools for the production of 3D audio content, which can be integrated in typical recording, editing, and mixing processes as well as commonly used digital audio workstations (DAWs). This paper gives an overview of the advances made in the project as well as the underlying technologies. Special focus is given to technological features implemented, such as spatial room impulse responses (SRRs), captured with 3D microphone arrays, and the personalization of head-related transfer functions (HRTFs) parting from a database of high-resolution binaural filters.