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Aalto University - Acoustics Lab

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The professor's and researchers working at the Aalto Acoustics Lab have prepared video presentations and demos in the special facilities of the laboratory.

The laboratories were renovated in two years ago, so they are now in great shape. Most of the video material is recorded binaurally so that it can be enjoyed well with headphones.

The spaces include the Large Anechoic Chamber named after its designer Lampio, the Variable Acoustics Room Arni (named after Paavo Arni, a Finnish pioneer of variable acoustic design), the Listening Room Ojala (named after Prof. Matti Ojala, who discovered the transient intermodulation distortion), sound-proof listening booths, and a Multichannel Anechoic Room called Wilska (named after the Finnish developer of an early dummy head in the 1930s).

The Large Anechoic Room is the most silent place in Finland, with a background noise level of -2 dB. Our anechoic demonstrations show the directivity of the human mouth, distance decay, and a balloon pop completely free of reverberation. In the Variable Acoustic Room Arni, the listeners can appreciate the dramatic changes in the room reverberation caused by opening and closing all or some of the panels in all walls of the room.

The Listening Room demo will reveal what can be achieved with a multichannel audio system containing a dozen large hi-fi loudspeakers. The Multichannel Anechoic Room Wilska has over 40 small loudspeakers installed on a spherical grid.

In the demo, the audience can hear how the same excerpt of orchestral music can be played in different concert halls, such as the Berlin Philharmonie and the Berlin Konzerthaus, using a virtual acoustic system developed at Aalto.

Furthermore, the video presentation will give information about the BSc, MSc, and doctoral education provided in the field of acoustics and audio technology at Aalto University.

All our teaching in MSc and doctoral levels is given in English.

<https://www.aalto.fi/en/aalto-acoustics-lab>