**Speech Dereverberation Technique for Audio Postproduction**

**Overview**

We devised a novel way of estimating and reducing the reverberation of reverberant speech without prior knowledge about the acoustic transfer function between the speaker and the microphone, and we developed dereverberation software based on it. This software is the first of its kind, and it allows audio engineers to create audio content with the ideal amount of reverberation in accordance with the director’s intention and camera work.

**Features**

[Methodology]

- Recorded audio signals consist of source sound consisting of the direct signal and early reflections arriving within 30 to 50 ms that are correlated to the direct signal and reverberations that are uncorrelated to the direct signal. The MSLP* method accurately estimates the reverberation without prior knowledge about the acoustic transfer function between the speaker and the microphone.

[Characteristics of the software]

- High-quality dereverberation which meets professional standards
- Plug-in complying with the de facto standard platform used in post-production

**Application scenarios**

- In film, TV, and commercial postproduction work, our software helps to create better content by removing inappropriate reverberation
- It helps to improve the intelligibility of speech recorded at lectures and meetings
- In the future, it will support intelligent hearing-aids and communication robots

* MSLP: Multi-step Linear Prediction is a family of the linear prediction algorithms that predict the current signal based on N samples of past signals.