

## Background

## Design in Consideration of Frequency Characteristics

### Sound quality evaluation issues

Human resource development  
Technology transfer

Reliability  
Reproducibility

Issues

Construction of **quantification method**  
that does not rely solely on knack

### The purpose of this study

Focus on  
**expansive feeling**  
and **Reverberation**

Contributes to **improving**  
**evaluation reliability**  
and **design efficiency**

## Content

### Auditory characteristics of RT and compensation

Grasp of the **auditory characteristics** of reverberation time

SPL adjustment  
RT adjustment

Suppression of variation in band  
subjective reverberation time

### Grasp impression change by subjective evaluation

Grasp of changes in impression by **reverberation design**

- Time characteristics
- Frequency characteristic

**Methods**

- SD method
- Paired comparison method

### Construction of expansive feeling estimation model

Model construction using **multiple regression analysis**

Mathematically **verification** of subjective evaluation results

**Multiple regression model**

$$y = a_1x_1 + a_2x_2 + \dots + a_nx_n + b$$