1 Introduction

This is a multimedia package associated with our submitted paper “Constrained Multi-channel Speech Dereverberation”. It contains the demo of the proposed multi-channel speech dereverberation method (4-channel split I divergence with proportionate sparsity) in different conditions, and a comparison among various methods.

2 Experiment 1: Demo of the Proposed Method

- $T_{60} = 200\text{ms}$:
  - Reverberant speech: rev\_200ms.wav
  - After processing: derev\_200ms.wav

- $T_{60} = 400\text{ms}$:
  - Reverberant speech: rev\_400ms.wav
  - After processing: derev\_400ms.wav

- $T_{60} = 600\text{ms}$:
  - Reverberant speech: rev\_600ms.wav
  - After processing: derev\_600ms.wav

- $T_{60} = 800\text{ms}$:
  - Reverberant speech: rev\_800ms.wav
  - After processing: derev\_800ms.wav

- Recording in a meeting room:
  - Reverberant speech: rev\_room.wav
  - After processing: derev\_room.wav
3 Experiment 2: Comparison

The $T_{60}$ of test reverberant speech is 800 ms.

- Reverberant speech: rev.wav
- (a) Single-channel by Wang [6]: wang.wav
- (b) Single-channel L2 [1, 2]: Single_L2.wav
- (c) Singl-channel I divergence: Single_I divergence.wav
- (d) Dual-channel L2: Dual_L2.wav
- (e) Dual-channel I divergence: Dual_I divergence.wav
- (f) 4-channel I divergence:4_I divergence.wav
- (g) 4-channel split I divergence with proportionate sparsity:4_split I divergence_proportionate_sparsity.wav