

Overview

- **Music Source Separation (MSS)**

- Introductions & Related works.
- Motivation1: MSS empirical upper bounds.
- Motivation2: Channel-wise subband feature.
- Proposed model: *Channel-wise subband phase-aware ResUNet (CWS-PResUNet)*.

- **Speech Enhancement (SE) topics.**

- **General Speech Quality Restoration (GSR)**

- Introductions & Related works.
- Motivation1: Single task speech restoration & weakness.
- Motivation2: How human brains percept distorted speech signals.
- Proposed model: *VoiceFixer*.

Introductions

Music Source separations

- Isolating sound sources from a mixture audio.
 - e.g., Bass, drums, vocals, and other

