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