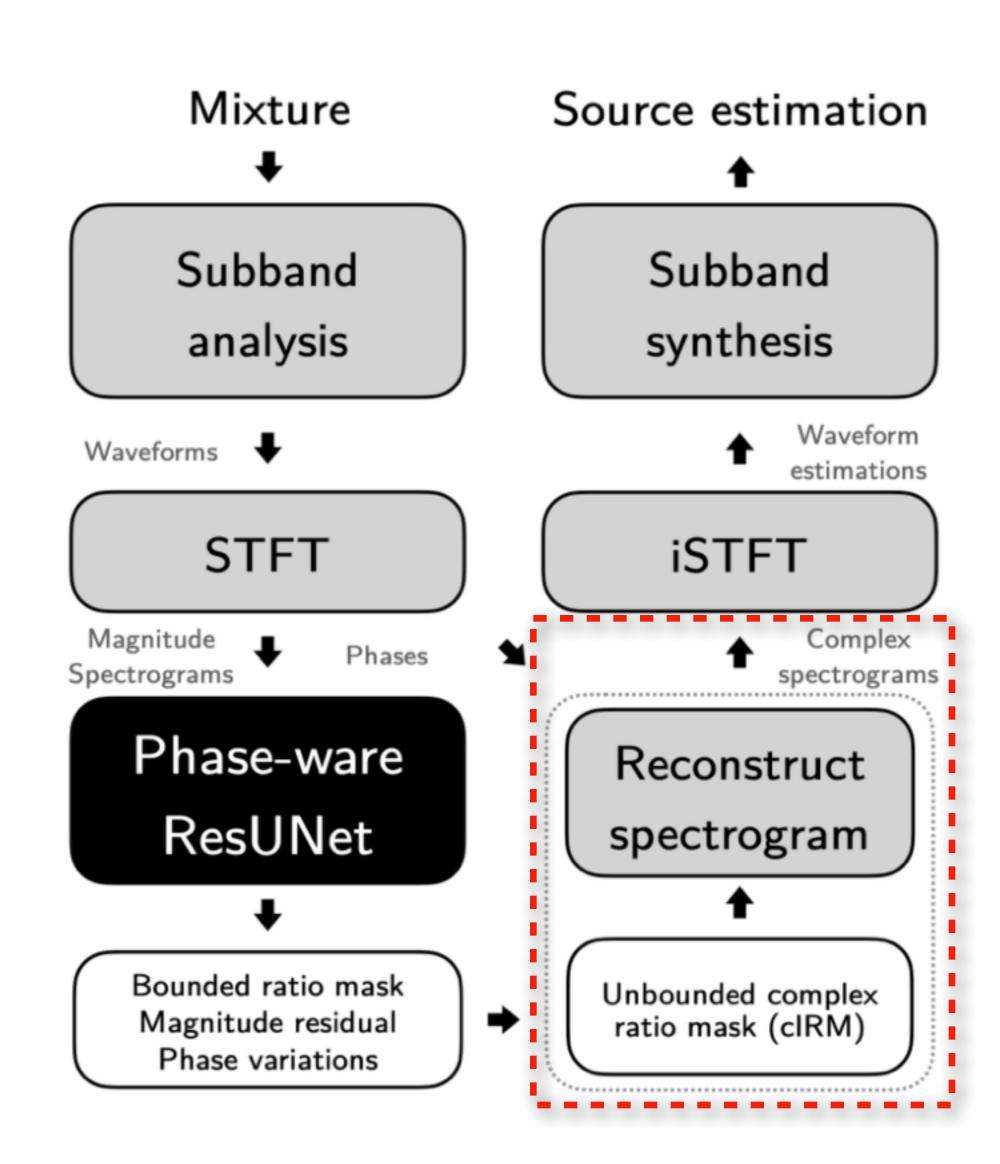
CWS-PResUNet

Step3: subband signal reconstruction

- Input:
 - Subband magnitude spectrogram: $|X'|_{8 \times T \times \frac{F}{4}}$
- Estimate:
 - Subband phase variation: \hat{P}_i, \hat{P}_j
 - Subband IRM: $sigmoid(\hat{M})$
 - Subband magnitude residual: \hat{Q}
- Operation:

•
$$\cos \angle \hat{\theta} = \hat{P}_r / (\sqrt{\hat{P}_r^2 + \hat{P}_i^2}), \sin \angle \hat{\theta} = \hat{P}_i / (\sqrt{\hat{P}_r^2 + \hat{P}_i^2})$$

• $\hat{S}' = \text{relu}(|X'| \odot \text{sigmoid}(\hat{M}) + \hat{Q}) \exp^{j(\angle X' + \angle \hat{\theta})}$



CWS-PResUNet

Step4: Subband synthesis

- Input
 - Subband signal estimation: \hat{s}'
 - Analysis filter banks: $g^{(j)}$, j = 1,2,3,4
- Operation

$$\hat{s}_{2\times L} = \sum_{j=1}^{4} (US_4(\hat{s}'_{2\times 4\times \frac{L}{4}}) * g_{4\times 64}^{(j)})$$

