Reduced-bandwidth multichannel Wiener filter based binaural noise reduction and localization cue preservation in binaural hearing aids

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AUDIO SAMPLES

The audio samples can be found on an anonymous ftp server at:
ftp://ftp.esat.kuleuven.be/pub/sista/bcorneli/ReducedBW_audioSamples/

Audio samples of the comparison in figures 6-9 are provided. The (stereo) signals were resampled to 44.1 kHz and saved in the .wav format. Make sure to use properly balanced headphones when listening to the audio samples.

The wavfiles are grouped in 8 folders (4 spatial scenarios, with batch or adaptive implementation). The outcomes for the 9 algorithmic conditions are provided in each folder, whereby the files are named as indicated in the figures and Table I of the paper. An “UNPROC” condition is also provided, which corresponds to the (unprocessed) left and right front microphone signals.

Two wavfiles are saved per scenario, implementation and algorithm:

- “..._output.wav” : The total output signals (speech+noise, i.e. z_L and z_R), all 5 sentences.
- “..._speechOnly.wav” : The speech component of the output signal (i.e. z_{xL} and z_{xR}), only the last 3 sentences.

Note that the performance comparison in the paper also only considered the last 3 sentences (after filter convergence).