SPEECH ENHANCEMENT IN HEARING AIDS USING REMOTE MICROPHONES

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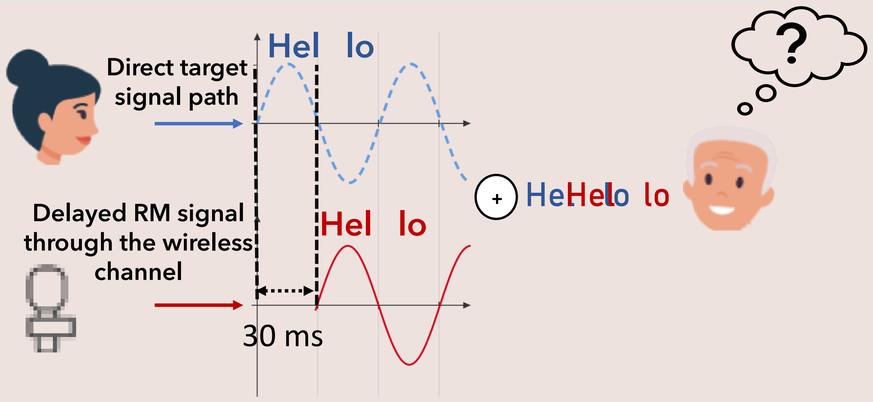
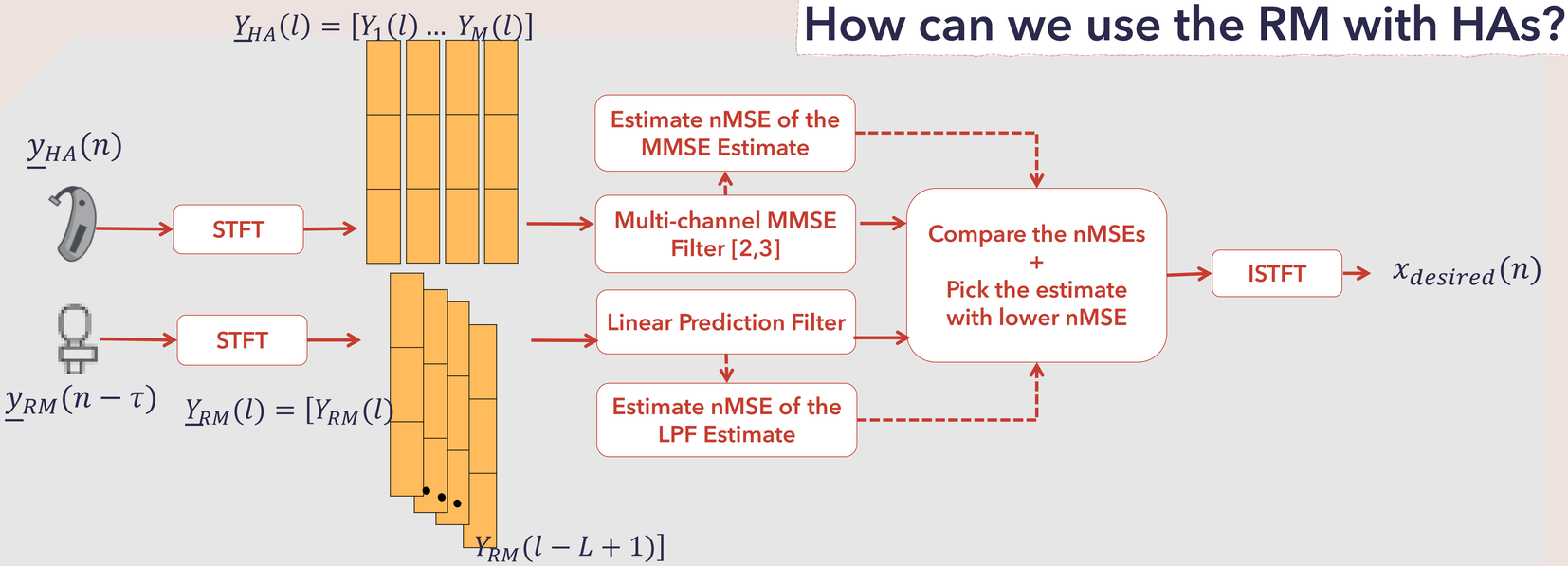
Introduction

- Time differences of arrival (TDOA) between Remote Microphone (RM) signal and Hearing Aid Microphone (HA) signals are typically overlooked in methods in literature.
- Direct playback of the RM signal with TDOA lead to undesirable audio artifacts like comb-filtering and echoes [1].



Method

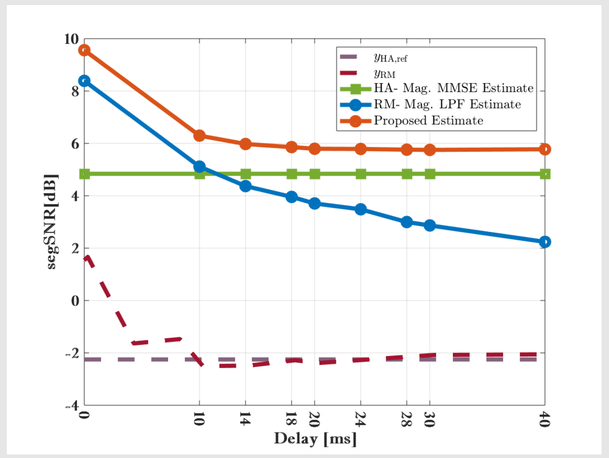
How can we use the RM with HAs?

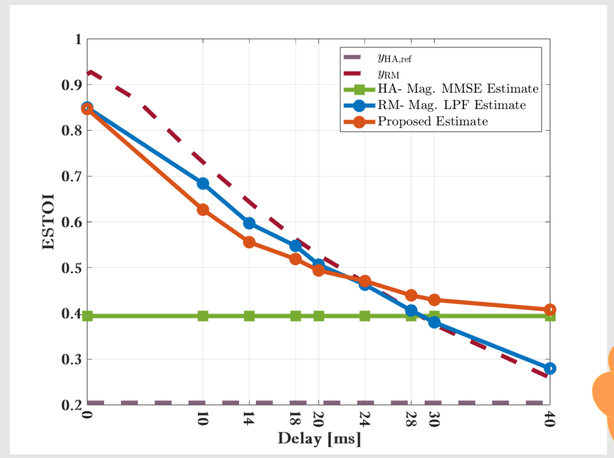


Up to what TDOA can the RM be useful?

Results

With ambient café noise at 0 dB….





The RM signal can be used up to TDOA<40ms.

Listening tests are underway!

References

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This project has received funding from the European Union's Horizon2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 956369.