

# 1 Introduction

ANC - bad speech - Feedforward - Delay LP - We do simulation

## 2 Methods

FXLMS - LP (Wiener med Wiener-Hofs fra ACF(LPC))

## 3 Results of Simulation

- LP Parameters (Framelength, N - Overlap, O - Prediction Gain, PG)
- - No delay, no LP needed - it just works! - For delay use LP FXLMS - For optimal parameters gives 40 dB for delays below 14 @ 48 kHz.
- Compared in 1/3 - LP FXLMS gives up to 30 dB

## 4 Discussion

- High instruction count with optimal parameters too high - LP FXLMS er bare godt, lower P the better - Multirate can be used
- LP FXLMS compared to FXLMS is better for higher freqs
- counter-counter-phase at 2400 Hz, which gives gain instead of attenuation.

## 5 Conclusion

- All in all the preposition works - we attenuate speech greatly - up to 30 dB with LP for P=10
- But it is unfeasible this way due to computational cost, with these parameters we need 15000 instructions/sample. Our DSP's are too slow :(