**SSY 150, lecture-2 (speech compression) quiz questions, 2020-03-26**

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1. Which of the speech compression methods below are/is model-based methods?

LPC CELP Subband filters damped sinusoids



1. For a clean speech signal (without background noise), how many **spectral peaks** are adequate to characterize the speech signal?

2 3 4 5 other numbers (specify)



1. For the above spectral peaks you chose, what is the **model order** *p* for the LPC model?

3 4 5 6 Others (p=10 )



1. Which speech compression method below may generate, in general, better synthetic speech quality?

LPC CELP Subband-based Others (specify a name)



1. Which speech compression method below may obtain the highest compression rate?

LPC CELP Subband-based Others (specify a name)



1. Due to the masking effect of human auditory system, weak frequency components are masked (inaudible) by a neighboring strong tone within the following frequency range:

1 KHz 500 Hz one bark scale one critical band Others (specify)



1. Are speech /audio signals sensitive to phase changes?

yes no



1. For designing an objective speech quality measure, the best choice is to choose a criterion in:

time domain frequency domain bark frequency domain others (specify)



1. Speech/audio perception in human auditory systems can be described by cochlear filters, whose frequency bandwidth is:

equal bandwidth logarithmic bandwidth Octive bandwith Others (specify)



1. Does MP3 provide the best compression/coding method for music? Chose one method below you think is the best for compression/encoding music:

MP3 AAC MP4 Others (specify)



Thank for participating the quiz, hope it is fun to you !