



*Efficient processing of AM and FM cues: effects of age and hearing loss.*

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Efficient auditory processing is constrained by stochastic and deterministic factors. Stochastic factors correspond to peripheral and central sources of neural variability (referred to as internal noise) related to sensory coding and random fluctuations in attention or memory storage. Deterministic factors correspond to the central ability to use the available information : this information may be ignored because of limited attentional capacity or forgotten because of limited memory capacity; in addition, decision strategy of observers may not be optimal. We will review recent work investigating the contribution of internal noise and listening strategies to amplitude-modulation (AM) and frequency-modulation (FM) detection for young and older normal-hearing and hearing-impaired subjects.