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**Temporal fine structure cues in auditory stream segregation of
complex tones**

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The ability to understand speech-in-speech is generally described to be related to the capacity to segregate one auditory stream among others sound sources. The channeling theory suggests that sequential stream segregation is basically sustained by frequency selectivity. However, it has been evidenced that sequences of stimuli that evoked the same excitation pattern can be streamed apart based on temporal cues only. Other results involving hearing impaired listeners with enlarged auditory filters hardly fit in with this theory. More recently, several reports in the literature and new attempts of modelization underline the potential interest of temporal fine structure cues for stream segregation. The current study is dedicated to test further the potential interest of temporal fine structure cues to stream apart sequences of unresolved complex tones with alternating fundamental frequencies. Several conditions of envelope saliency (positive and negative Schroeder phase complex tones) and several conditions of fine structure will be used in a streaming test leading to an objective measure related to segregation.