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Brain mechanisms of auditory attention

Abstract: Not every sound that is audible gets processed in the brain in the same detail. Instead, your brain filters the information reaching the ears, letting through sounds that either seem inherently important (like the sudden crash of a shattering window) or are important for whatever task you are undertaking (like the question an Important Scientist poses to you at a poster session). Depending on what aspect of a sound you focus on, you recruit distinct brain networks that are shared with other sensory modalities. This talk will explain what we know about control of both spatial and non-spatial processing of sound, based on neuroimaging and behavioral studies, and discuss ways this knowledge can be utilized in developing new assistive listening devices.
