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Improvement of speech intelligibility by audio hearing systems

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All hearing aids and cochlea implants have algorithm to improve the speech intelligibility. The idea is to share human speech and noise and to find different ratings. The result should be easier to understand by impaired people.

On the market there are big efforts to recognize speech and to separate it from noise. In this field we can notice a remarkable progress in the last years. But the reverberant sound in rooms or noise from same direction like the signal need a lot of work to suppress them effective.

The simplest way seems to be to gets the original speech signal direct from the source and to processes it individual in hearing devices. Such systems exist for a long time. And they are also developed.

Induction loop systems for hearing aid users are well known in churches, cinemas, theatres and conference rooms. Other possibilities are wireless infrared or HF systems. But the available systems are very different in costs and benefit for management and clients. Always it is easy to get an improvement of speech intelligibility. If these systems are used the hearing can be more relaxed and self-evident.

The presentation will show the level of most used external audio hearing systems, their possibilities to improve the signal to noise ratio and the benefit for hearing aid or cochlear implant users.

