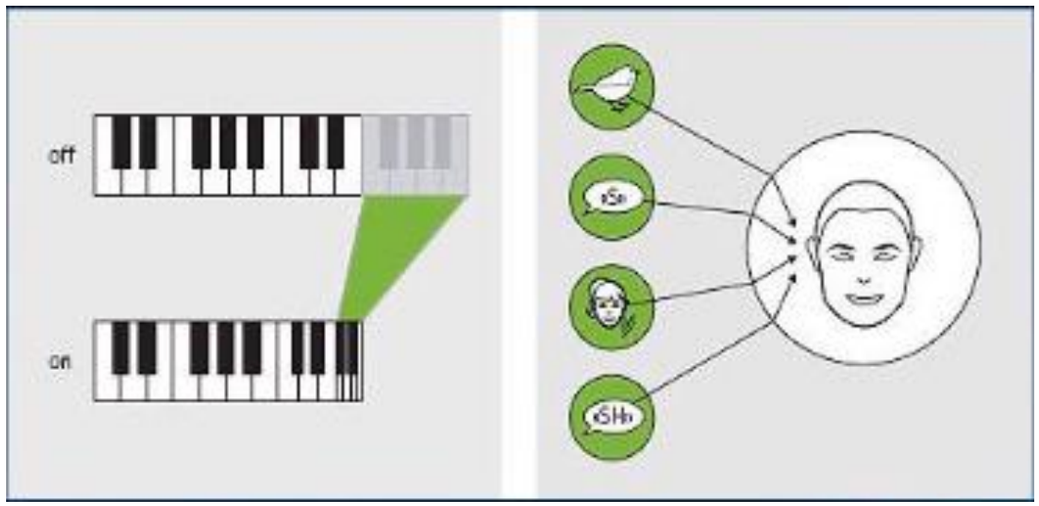
SoundRecover: non-linear frequency-compression scheme



PHONAK
life is on

Maria Ausilia Napoli Spatafora

Progetti
Informatica Musicale 2018/19

Main Goals

- Show a medical application of the sound
- Outline background information from the field of audiology
- Learn the importance of perceptual bandwidth and how frequency compression extends it
- Know SoundRecover and SoundRecover 2: commercial non-linear frequency-compression algorithms of Phonak.

References

- Phonak's Posters:
  - 028-0952-02/V1.00/2013-06/cu Printed in XXXX © Phonak AG All rights reserved
  - 028-1512-02/V1.00/2016-01/ © Phonak AG All rights reserved
  - 028-1528-02/V1.00/2016-01/ © Phonak AG All rights reserved
- H. McDermott, D. Baldwin, M. Nyffeler: The importance of perceptual bandwidth and how frequency compression extends it. *The Hearing Journal* 2010, May
- R. W. McCreery, M. A. Brennan, B. Hoover, J. Kopun, P. G. Stelmachowicz: Maximizing Audibility and Speech Recognition with Non-LinearFrequency Compression by Estimating Audible Bandwidth. *Ear Hear* 2013, March

Didactic topics

- Perceptual Importance of High Frequencies
- Hearing Instrument Bandwidth
- Perceptual Bandwidth
- Technical Description of SoundRecover and SoundRecover 2
- Clinical Evidence
- Example of fitting and fine tuning of SoundRecover 2