



Contribution ID: 195

Type: **Oral**

## **Bionic Hearing: the Science and the Experience**

*Thursday, 20 September 2018 10:45 (45 minutes)*

Cochlear implants are the first device to successfully restore neural function. They have instigated a popular but controversial revolution in the treatment of deafness, and they serve as a model for research in neuroscience and biomedical engineering. After a visual tour of the physiology of natural hearing the function of cochlear implants will be described in the context of electrical engineering, psychophysics, clinical evaluation, and my own personal experience. The audience will have the opportunity to experience speech and music heard through a cochlear implant. The social implications of cochlear implantation and the future outlook for auditory prostheses will also be discussed.

About the speaker:

Ian Shipsey is a particle physicist, and a Professor of Physics at Oxford University. He has been profoundly deaf since 1989. In 2002 he heard the voice of his daughter for the first time, and his wife's voice for the first time in thirteen years thanks to a cochlear implant.

### **Summary**

**Presenter:** IAN, Shipsey (Oxford University)

**Session Classification:** Invited