Announcement

Biophysics of Hearing and Seeing
Prof. Hoerber

Description
The course on Biophysics of Hearing and Seeing will provide a basic understanding of these senses with respect to their anatomy and physiology. In comparison with recent technical developments of optical and acoustic sensor systems, the physical principals to characterize the performance of these senses will be introduced.

Content
- Evolution of seeing
- New developments in imaging and image processing techniques
- Anatomy and Physiology of the Eye
- Comparison between natural and artificial systems
- Introduction to Acoustic
- Anatomy and Physiology of the Ear
- Comparison between natural and artificial systems

Prerequisites
None

Literature
A.K. Khurana, CBS publishers & Distributors
ISBN: 8123912677

Richard L. Gregory, Oxford University Press
ISBN: 0198524120

The Evolution of the Eye, 8.10.2015
Georg Glaeser und Hannes F. Paulus, Springer
ISBN: 3319174754

Takao Kuroda, Apple Academic Press
ISBN: 1482220056

Hearing, Anatomy, Physiology and Disorders of the Auditory System
Aage R. Moller, Plural Publishing, 1.10.2011
ISBN: 1597564273

Fundamentals of Hearing
William Yost, Academic Press, 2.10.2006
ISBN: 0123704731

Additional information
Lecture with exercises, 4 ECTS credits

Date / Duration / Location
Wednesday, 5.7., 17-19  Friday, 7.7., 14-16  Monday, 10.7., 17-19
Wednesday, 12.7., 17-19  Friday, 14.7., 14-16  Monday, 17.7., 17-19  Wednesday, 19.7., 17-19
Oral presentations of the participating students in August.

Lecturer
Prof. Hoerber, Senior Professor