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 (block course in March 2017)
- 4 ECTS credits

**Lecturer**
Prof. Hoerber, Senior Professor