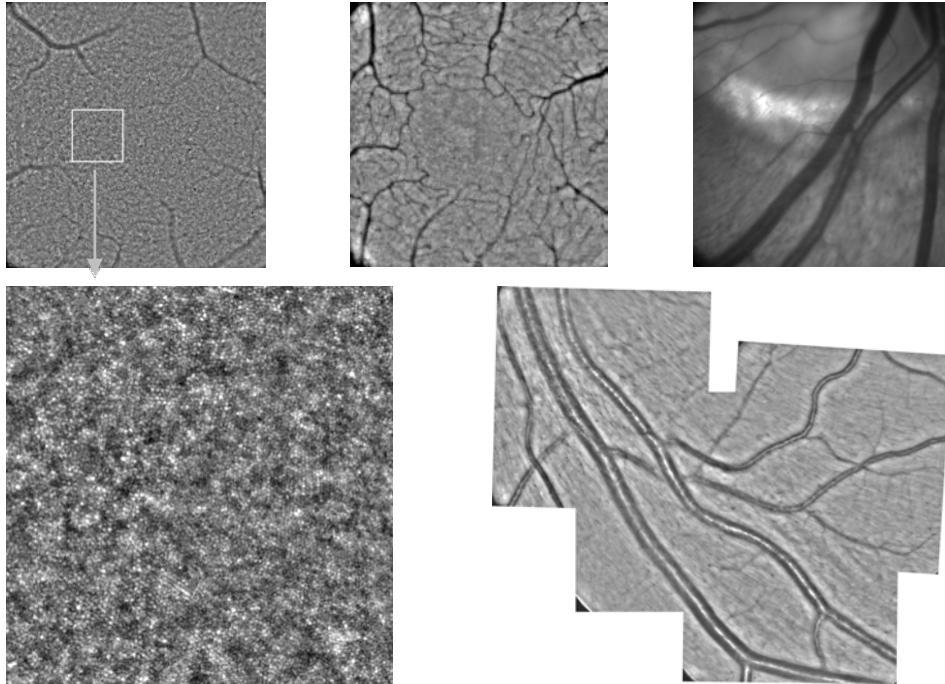


Adaptive Optics for Retinal Imaging and Super-Vision

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Adaptive optics (AO) is a relatively new technology that permits compensation of dynamical aberrations in optical imaging systems. Basically an AO system consists of a sensor measuring the aberrations, an active component performing aberration compensation and a control-loop transforming the sensor measurements into commands to the active component. Currently the main areas of application lie within astronomy and communication, in both cases related to counteracting the effects of atmospheric blurring, and within eye research, related to counteracting the effects of the in vivo dynamical aberrations of the human eye.

In this presentation some recent highlights of the last type of application are presented. Compensation of the aberrations of the eye works two ways: Either an observer may look into the eye of a subject and see sharp images of individual sensors or tiny capillaries of the retina, or the subject may look out through the corrective optics allowing for so-called super-vision. Some clinical prospects of AO for eyes will be discussed. The technical layout of a prototype setup for AO retinal observations will be presented and discussed and preliminary results from observations on a few subjects will be shown.

Arrangements nr.: 90927

- **Tirsdag den 24. marts kl. 19:30, Kalvebod Brygge 31-33, København**
- **Gratis arrangement for IDA-medlemmer, medlemmer af IEEE Denmark section og studerende.**
- **Tilmelding via www.ida.dk eller tlf. 33 18 48 18**



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