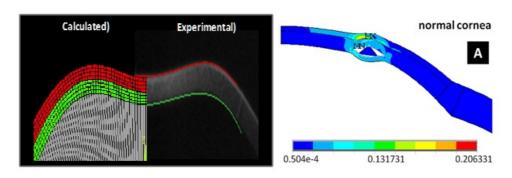




SEMINARIO DE IMÁGENES Y VISIÓN INSTITUTO DE OPTICA (CSIC)

Corneal Biomechanical Properties: Measurement, Modification and Simulation

Sabine Kling



In this dissertation advanced imaging technologies in combination with sophisticated analytical tools were applied to address the measurement of the corneal biomechanical properties. Several techniques were developed to determine the corneal stiffness in vitro and to study the corneal behavior as a function of different factors (such as hydration, geometry, intraocular pressure, corneal stiffness). Experimental data were used to build numerical models, which were able to reproduce the observed biomechanical response of the cornea. Numerical models also were applied to retrieve biomechanical parameters from in vivo deformation measurements and to study the outcome with implantation of intra-stromal ring segments.

Miércoles, 29 de Enero de 2014 15:00 horas Sala de Conferencias. Instituto de Optica (CSIC). C/ Serrano 121, 28006 Madrid

La lectura de tesis frente al tribunal será en Valladolid el Jueves 30 de Enero de 2014 a las 11:30