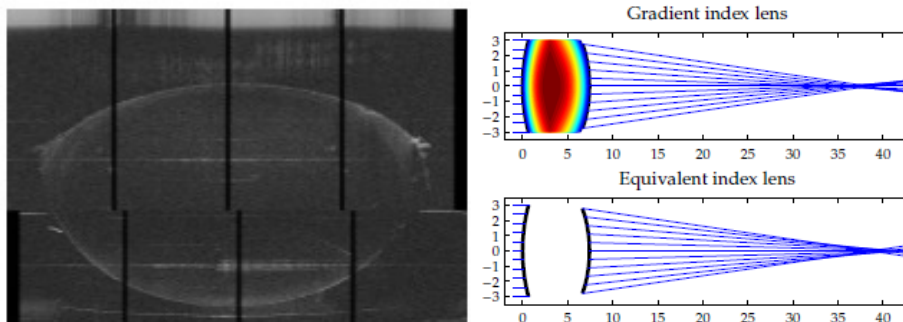

**SEMINARIO DE IMÁGENES Y VISIÓN
INSTITUTO DE OPTICA (CSIC)**

**Reconstruction of the gradient
refractive index of the crystalline lens
with optimization methods**

Alberto de Castro



The optical properties of the crystalline lens depend not only on the geometry of the external shape, but also on its refractive index. In many species, the refractive index shows a non-homogeneous distribution, with higher index values in the nucleus than in the surface. The precise knowledge of the optics of the crystalline lens and its changes with accommodation and aging are currently limited by the challenges of estimating the gradient refractive index (GRIN) distribution.

Understanding of the role of the gradient index distribution of the crystalline lens on the crystalline lens optics will allow not only to gain deeper insights into the optical properties of the lens, and their variation with accommodation and aging, but also to improve the imaging of the lens with optical techniques in which the posterior lens surface appears distorted by refraction from preceding ocular surfaces and GRIN.

Miércoles, 4 de julio de 2012

15:30 horas

**Sala de Conferencias. Instituto de Optica (CSIC).
C/ Serrano 121, 28006 Madrid**

La lectura de tesis frente al tribunal será en Valladolid
el Viernes 6 de julio de 2012 a las 11:30

Información: Alberto de Castro, Instituto de Optica, CSIC. Tel 915616800 x 942303