

An Adaptable Imaging Camera

University of Durham

MSSL

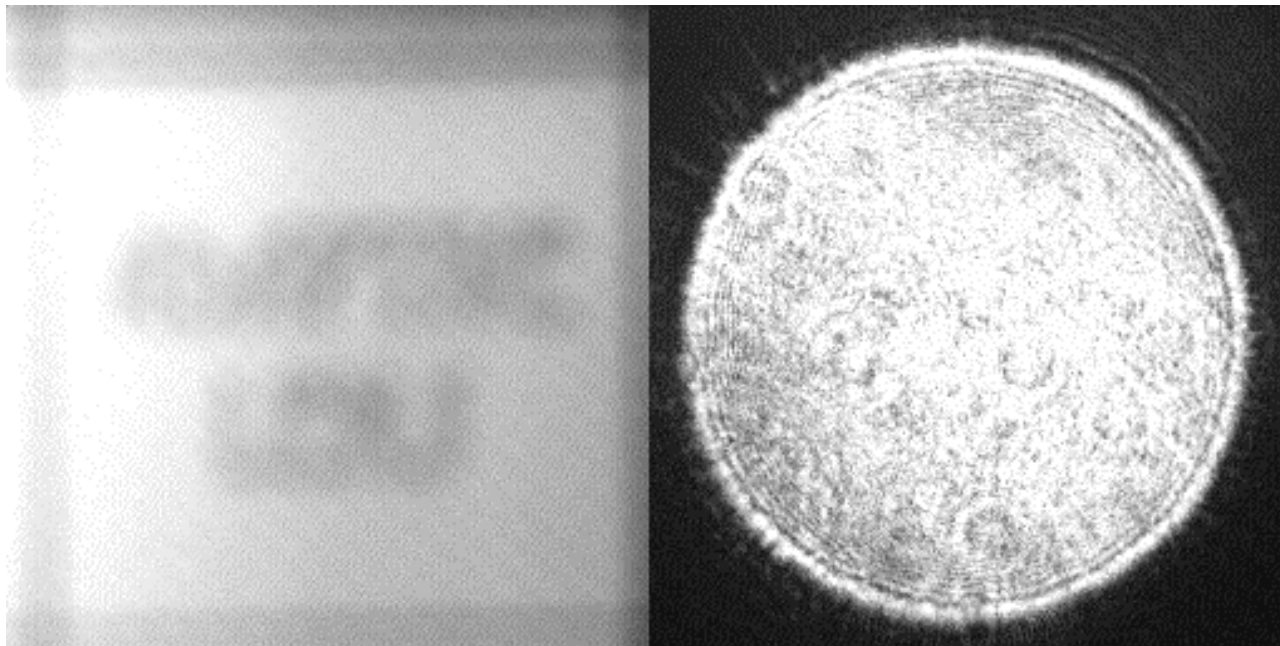
CRL-Opto

Astrium

Optical Surfaces

Aims

To create compound lenses incorporating liquid crystal technology which have a controllable ZOOM, FOCUSING RANGE, aperture size, and filter range:



Applications

- **COMMERCIAL**
 - Virtually unlimited commercial applications
- **SCIENTIFIC**
 - Space based imagers



Target Specifications

- Focus range 0.5m - infinity
- Zoom range 1:2
- Optical Quality PSF < pixel size
- Field of view 4°
- Polarization Linearly polarized
- Throughput ~80%
- Wavelength range 400-800nm

Participants

- **Durham:** LC Modelling, device physics
- **MSSL:** Optical Design, space implementation, Breadboard system
- **CRL-Opto** Lens construction
- **Astrium** End-user
- **Optical Surfaces**
Static lenses construction