

Astronomical Interferometry and Digital Image Processing - astro843

<i>Course</i>	Astronomical Interferometry and Digital Image Processing
<i>Course No.</i>	astro843

Category	Type	Teaching			Semester
		Language	hours	CP	
Elective	Lecture	English	2	3	WT

Requirements:

Preparation:

Form of Testing and Examination: Written or oral examination

Length of Course: 1 semester

Aims of the Course: Students learn the basics required to carry out research projects in the field of wave optics and astronomical infrared interferometry

Contents of the Course: Statistical optics; Wave optics; image detectors; resolution enhancement by digital deconvolution; interferometric imaging methods in optical astronomy; Theory of photon noise; iterative image reconstruction methods; astronomical applications

Recommended Literature:

J. W. Goodman; Introduction to Fourier Optics (Roberts & Company Publishers 3. Aufl. 2004)

Lecture Notes

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