

Outline

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Goal (7.5 ECTS)

**Understand how to use
astronomical telescopes and instruments
to learn more about the universe**

People

- Christoph Keller (UU, Chair of Experimental Astrophysics)
- Peter Jonker (SRON Staff Member)
- Michiel Rodenhuis (UU, PhD student in exoplanetary systems)

Communication

- everybody: through Blackboard
- C.U.Keller@uu.nl, P.Jonker@sron.nl, M.Rodenhuis@uu.nl

Course URL

www.astro.uu.nl/~keller/Teaching/ObsAstro2_2008

Contents

- contact information
- course schedule, subscribe to [iCal link](#)
- lecture presentations, exercises, exercise materials
- presentation topics and assignments including links to papers (only from UU computers)

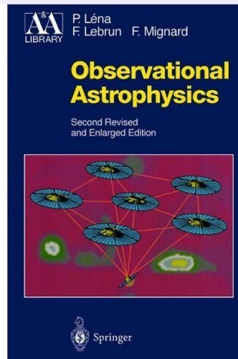
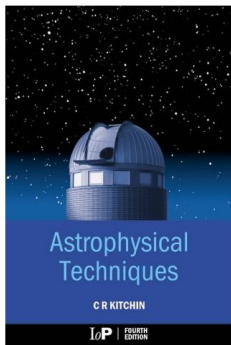
OSIRIS

The course web page takes precedence over OSIRIS.

Lecture Notes and Books

Lecture Notes

- written by Johan Bleeker and Frank Verbunt for previous years
- will be distributed in the coming days
- updates as needed



Course Schedule and Requirements

Weekly Schedule

Day	Time	Location	Topic
Monday	15:15 – 17:00	BBL 408	Exercises/Presentations
Tuesday	13:15 – 15:00	BBL 768	Lecture
Thursday	9:00 – 10:45	BBL 768	Lecture
Thursday	11:00 – 12:45	BBL 408	Exercises

Exercises

- exercises are integral part of course
- computer exercises and paper exercises (at home)
- home work has to be submitted by deadline
- will be checked, returned, and discussed
- solutions will not be made available in writing

Presentations

- select one original paper and present it to peers
- 20-minute presentation in English
- public and private discussion of presentation
- grade is for level of understanding of paper

Lectures

Title	Chapter	Instructor
Radiation Fields 1	1	Jonker
Radiation Fields 2	1	Jonker
Polarimetry 1		Keller
Polarimetry 2		Keller
Astronomical Measuring Process 1	2	Jonker
Astronomical Measuring Process 2	2	Jonker
Observational Astrophysics at SIU		Keller
Optical Spectroscopy		Keller
X-Ray Spectroscopy		Jonker
Fitting Observed Data 1	5	Jonker
Fitting Observed Data 2	5	Jonker
Variability and Periodicity	6	Jonker
Imaging 1	4	Keller
Imaging 2	4	Keller
Indirect Imaging 1	3	Keller
Observational Astrophysics at SRON		Jonker
Indirect Imaging 2	3	Keller
The Future of Observational Astrophysics		Keller

Exams and Grades

Exams

- content
 - lectures
 - corresponding sections of lecture notes
 - exercises (computer and home work)
 - paper presentations and questions
- written exam after course ends
- oral exams after that

Grades

- 20% presentation
- 20% exercises
- 60% exam

Papers for Presentations

Topic	Paper with Link to ADS	Student Name	Presentation Date
Lucky Imaging	Law et al. 2006		20.10.2008
Limiting Magnitude	Harris 1990		20.10.2008
Crowded-field Photometry	Stetson 1987		20.10.2008
Fourier Filtering	Brault and White 1971		23.10.2008
Image Deconvolution	Lucy 1974		23.10.2008
Speckle Interferometry	Labeyrie 1970		23.10.2008
Radio Image CLEANing	Hogbom 1974		27.10.2008
Rotating Modulation Imaging	Hurford et al. 2002		27.10.2008
Asteroseismology	Bruntt et al. 2007		27.10.2008
Sensitive Polarimetry	Semel et al. 1993		3.11.2008
CCD Spectroscopy	Horne 1986		3.11.2008
Nod and Shuffle Spectroscopy	Glazebrook and Bland-Hawthorn 2001		3.11.2008
Fringe Removal	Malumuth et al. 2003		6.11.2008
Doppler Imaging	Vogt et al. 1987		6.11.2008