

## Outline

- 1 Course Content
- 2 Web Page
- 3 Lecture Notes and Books
- 4 Schedule and Requirements
- 5 Exams and Grades
- 6 Paper Selection

## 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, Research Fellow)
- Michiel Rodenhuis (UU, PhD student in exoplanetary systems)

## Communication to students

via email through [ns-ap433m@phys.uu.nl](mailto:ns-ap433m@phys.uu.nl)

## Course URL

[www.astro.uu.nl/~keller/Teaching/ObsAstro2\\_2007](http://www.astro.uu.nl/~keller/Teaching/ObsAstro2_2007)

## 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)

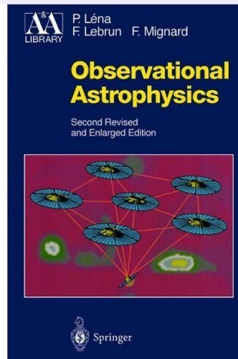
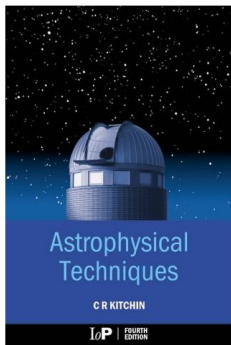
## Osiris URL, mostly outdated

[https://www.osiris.universiteitutrecht.nl/osistu\\_ospr/OnderwijsCatalogusToonCursus.do?cursuscode=NS-AP433M&collegejaar=2007&aanvangsblok=1](https://www.osiris.universiteitutrecht.nl/osistu_ospr/OnderwijsCatalogusToonCursus.do?cursuscode=NS-AP433M&collegejaar=2007&aanvangsblok=1)

# Lecture Notes and Books

## Lecture Notes

- written by Johan Bleeker and Frank Verbunt for previous year
- will be distributed during first lecture
- updates as needed



# Course Schedule and Requirements

## Weekly Schedule

<b>Day</b>	<b>Time</b>	<b>Location</b>	<b>Topic</b>
Monday	15:15 – 17:00	MIN 019	Presentations
Tuesday	13:15 – 15:00	BBL 768	Lecture
Tuesday	15:15 – 17:00	MIN 019	Exercises
Thursday	9:00 – 10:45	BBL 768	Lecture
Thursday	11:00 – 12:45	MIN 019	Exercises

## Exercises

- exercises are integral part of course
- solutions to exercises only discussed during allocated time
- no further distribution of results

## Presentations

- select one original paper and present it to peers
- presentation in English

# Lectures

<b>Title</b>	<b>Chapter</b>	<b>Instructor</b>
Radiation Fields 1	1	Jonker
Radiation Fields 2	1	Jonker
Astronomical Measuring Process 1	2	Jonker
Astronomical Measuring Process 2	2	Jonker
Fitting Observed Data 1	5	Jonker
Fitting Observed Data 2	5	Jonker
Variability and Periodicity	6	Jonker
Indirect Imaging 1	3.1	Keller
Indirect Imaging 2	3.3	Keller
Spectroscopy 1	3.2	Keller
Spectroscopy 2	3.4	Keller
Photon Detectors 1	4.1-4.4	Keller
Photon Detectors 2	4.5-4.6	Keller
Photon Detectors 3	4.7	Keller
Observational Astrophysics at SIU		Keller
Observational Astrophysics at SRON		Jonker

# Exams and Grades

## Exams

- Content
  - lectures
  - corresponding sections of lecture notes
  - exercises
  - paper presentations and questions
- written exam after course ends
- oral exams after that

## Grades

- 20% presentation
- 80% exam

# Papers for Presentations

Topic	Paper with Link to ADS	Student Name	Date
Crowded-field Photometry	<a href="#">Stetson 1987</a>		1.10.2007
Speckle Interferometry	<a href="#">Labeyrie 1970</a>		1.10.2007
Fourier Filtering	<a href="#">Brault and White 1971</a>		8.10.2007
Asteroseismology	<a href="#">Bruntt et al. 2007</a>		8.10.2007
Radio Image CLEANing	<a href="#">Hogbom 1974</a>		15.10.2007
Rotating Modulation Imaging	<a href="#">Hurford et al. 2002</a>		15.10.2007
Image Deconvolution	<a href="#">Lucy 1974</a>		15.10.2007
CCD Spectroscopy	<a href="#">Horne 1986</a>		22.10.2007
Nod and Shuffle Spectroscopy	<a href="#">Glazebrook and Bland-Hawthorn 2001</a>		22.10.2007
Lucky Imaging	<a href="#">Law et al. 2006</a>		22.10.2007
Fringe Removal	<a href="#">Malumuth et al. 2003</a>		29.10.2007
Doppler Imaging	<a href="#">Vogt et al. 1987</a>		29.10.2007
Polarization Analysis	<a href="#">Leyshon 1998</a>		29.10.2007