

# Steratmosferen

**Faculteit:** Faculteit Natuur- en Sterrenkunde

**ECTS-punten:** 7.5 **Categorie:**M **Cursuscode:** NS-AP426M **Periode:** 07-02-2005 t/m 22-04-2005 (PER3)

**Toegangseisen:** .

**Veronderstelde voorkennis:** The second-year course<BR>"Introduction to astrophysical radiative transfer"

**Voertaal:** English

**Inhoud:**

This course treats the theory of radiative transfer needed to explain stellar spectra. Spectral lines are a key diagnostic of astronomy but their formation in opaque gaseous media is not trivial. The course treats this topic at an advanced level, emphasizing non-LTE physics.

The second-year course "Introduction to astrophysical radiative transfer" is summarized at its start. An extensive numerical exercise class accompanies the course. A presentation of a landmark paper is also obligatory.

See also: <http://www.astro.uu.nl/~rutten/education/rjr-courses/>

**Cursusdoelen:** Understanding stellar line formation including bound-bound and bound-free scattering. Ability to formulate radiative transfer constraints, echanisms, and solution methods for a wide variety of astrophysical conditions. Obtaining a working knowledge of up-to-date numerical approaches.

**Contactpersoon:** prof. dr. R.J. Rutten

**Docent(-en):** prof. dr. R.J. Rutten

**Bereikbaarheid:**  
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**Inschrijven via OSIRIS Online mogelijk:** Ja

**Inschrijven voor bijvakkers mogelijk:** Ja

Werkvorm	Blok	Groep	Rooster			Gebouw	Zaal
Hoorcollege	PER3	1	07-02-2005 t/m 11-04-2005	Maandag	09.00 - 11.00	BBL	768 (N&S)
			11-02-2005 t/m 15-04-2005	Vrijdag	09.00 - 11.00	BBL	768 (N&S)
Practicum	PER3	1	11-02-2005 t/m 15-04-2005	Vrijdag	13.00 - 17.00	MIN	032 (N&S)
Presentaties Werkcollege	PER3	1	07-02-2005 t/m 11-04-2005	Maandag	11.00 - 13.00	BBL	768 (N&S)
			09-02-2005 t/m 13-04-2005	Woensdag	09.00 - 11.00	BBL	768 (N&S)
			11-02-2005 t/m 15-04-2005	Vrijdag	11.00 - 12.00	BBL	768 (N&S)

**Toelichting:** **Algemeen:**  
Presentaties  
At least one required.

Toets	Blok	Gelegenheid	Rooster	Gebouw	Zaal
Eindresultaat	PER3	1			
Eindresultaat	PER4	2			

**Toelichting:** **Beoordeling:**  
Eindresultaat  
Students have to attend the computer class, write a report in LateX and give a presentation. Final result: Exam 90%, presentation 10%.

**Verplicht materiaal:** **Dictaat**  
<http://www.astro.uu.nl/~rutten/>

*Aan deze gegevens kunnen geen rechten worden ontleend.*