

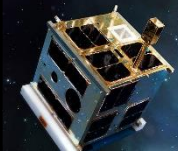


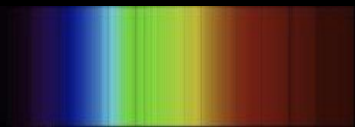
ProAm Kooperation Spektroskopie & Photometrie an Epsilon Persei

BRITE - ProAm Kooperation - Spektroskopie & Photometrie an epsilon Persei

Manfred Schwarz – www.astrophoto.at – ms@astrophoto.at

BAV-Veränderlichen-Beobachter-Treffen am 19. und 20. Mai 2017 in Hartha

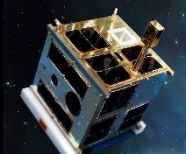


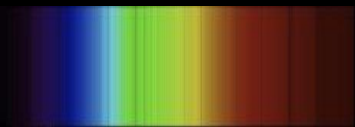


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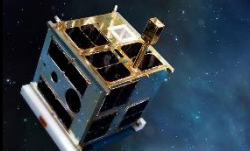




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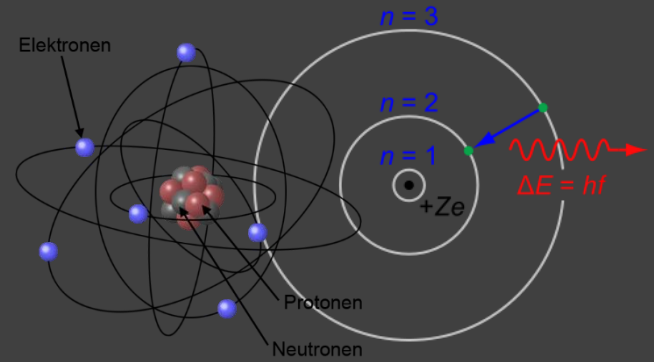


Spektroskopie Kurs und Workshop im Carl-Fuhlrott-Gymnasium in Wuppertal



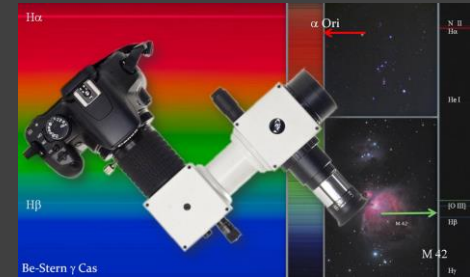
Michael Winkhaus

Geschichte, Grundlagen und Theorie



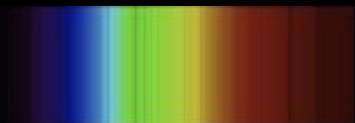
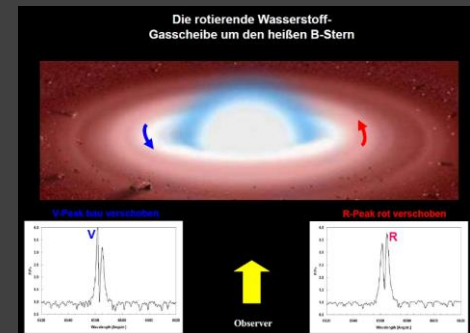
Bernd Koch

Geräte und Technik



Ernst Pollmann

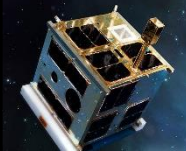
Praxis, Analyse und Auswertung



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Star-Analyser

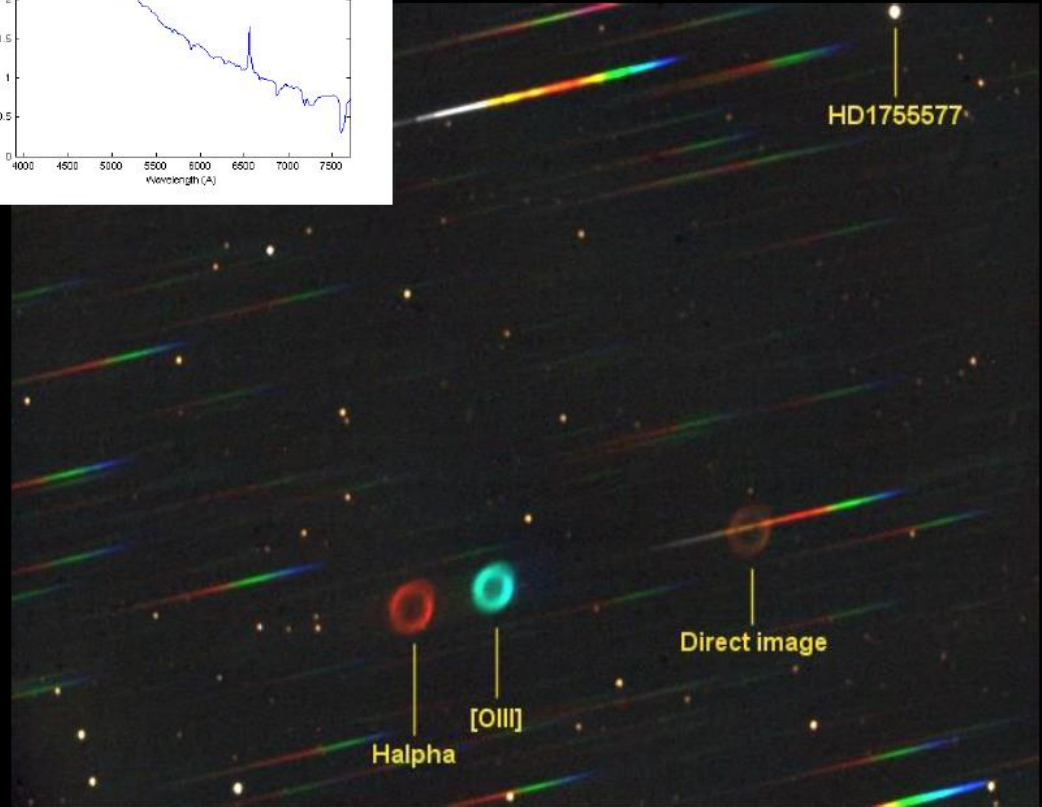
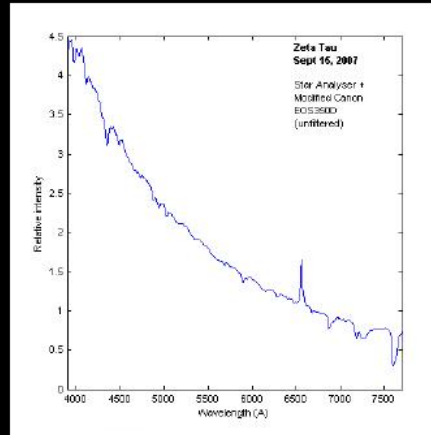
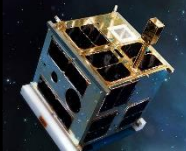


Foto: Christian Buil

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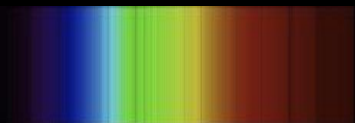
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Spaltspektrographen

Die Mittelklasse



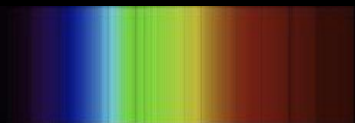
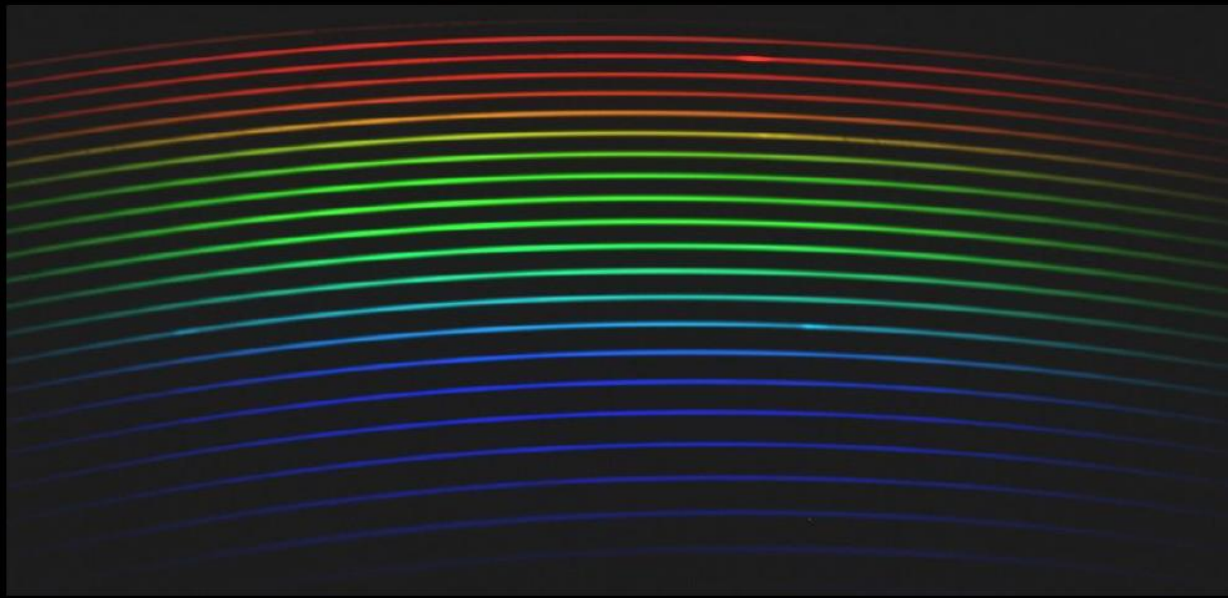
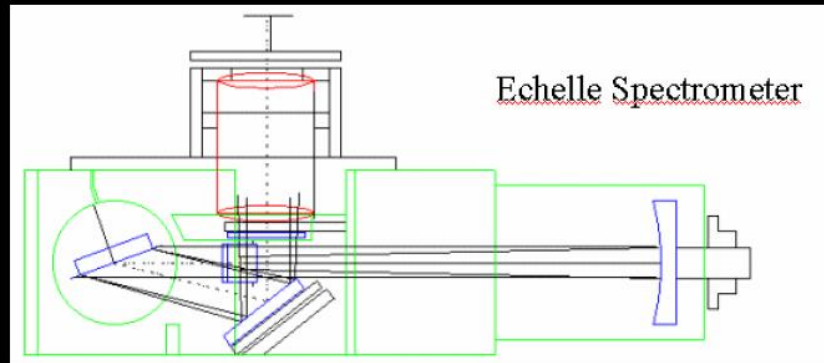
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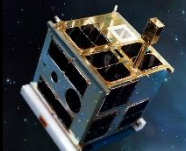
Echelle - Spektrographen



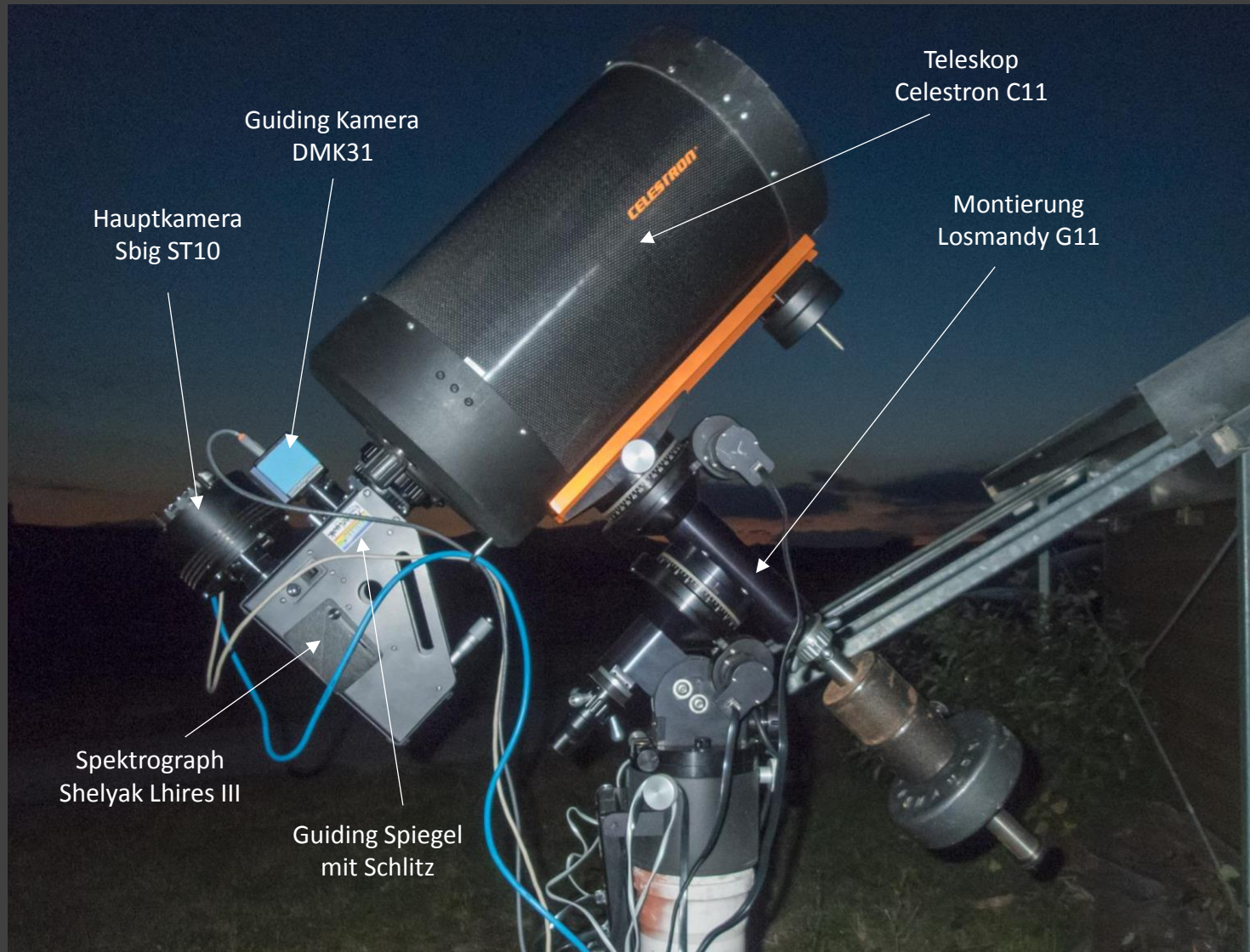
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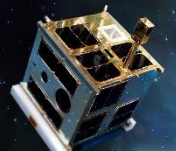
Praktischer Aufbau



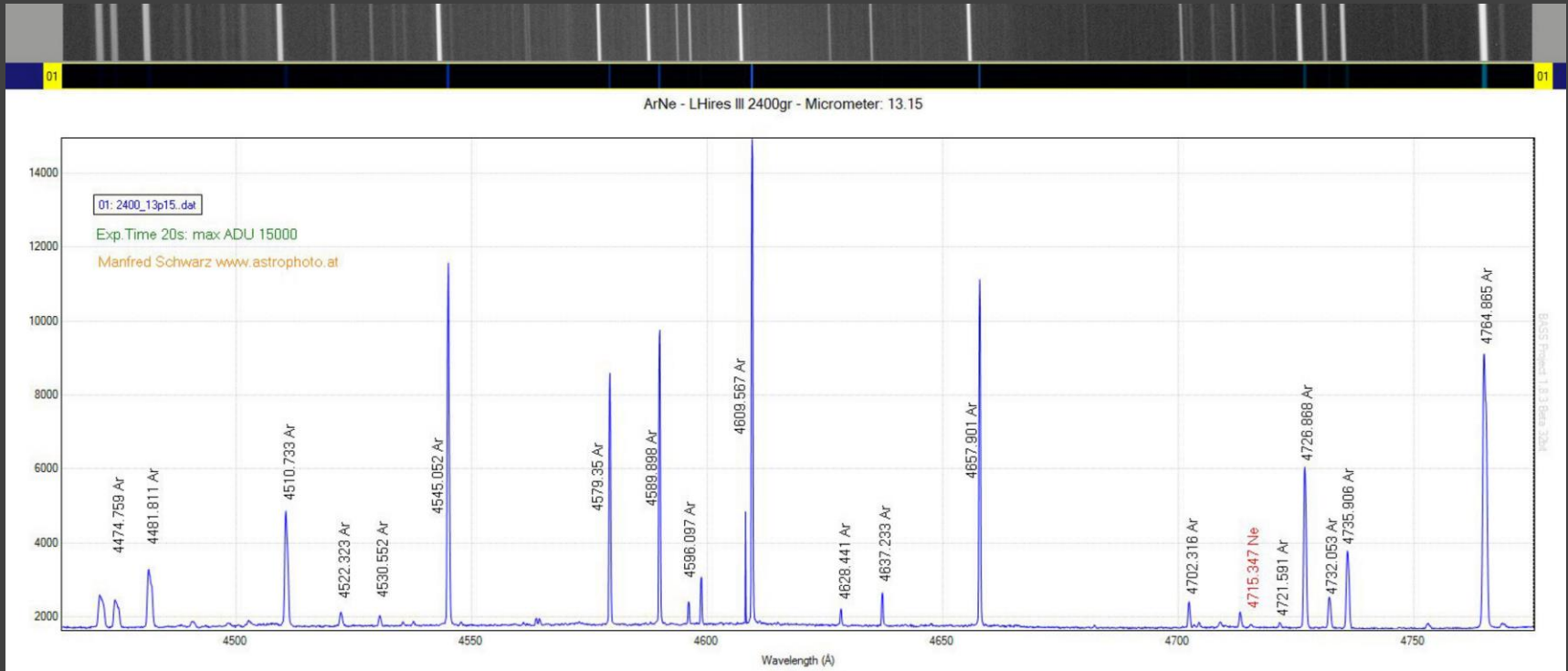
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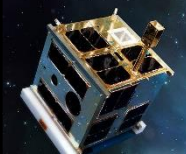
Kalibrierung über eingebaute ArNe Lampe



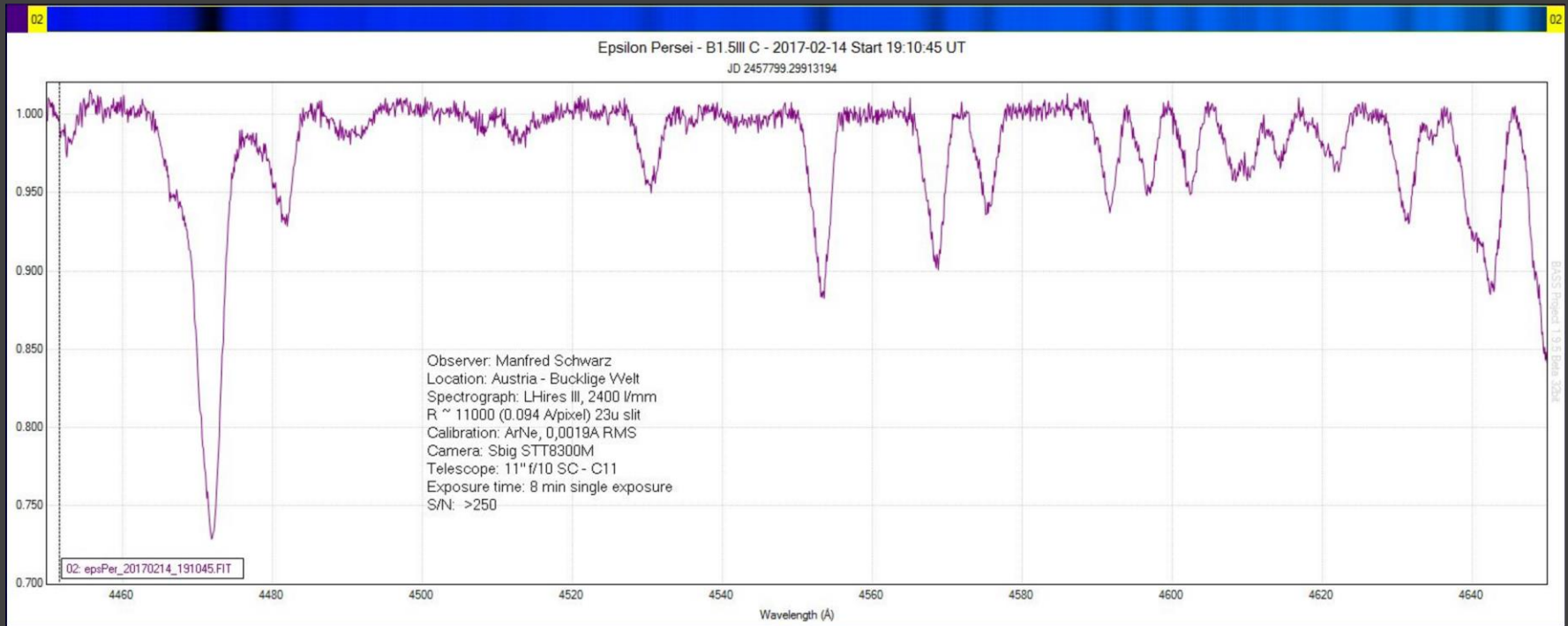
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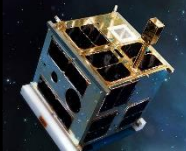
Einzelaufnahme von eps Per Si-III Linien bei 4560 Å



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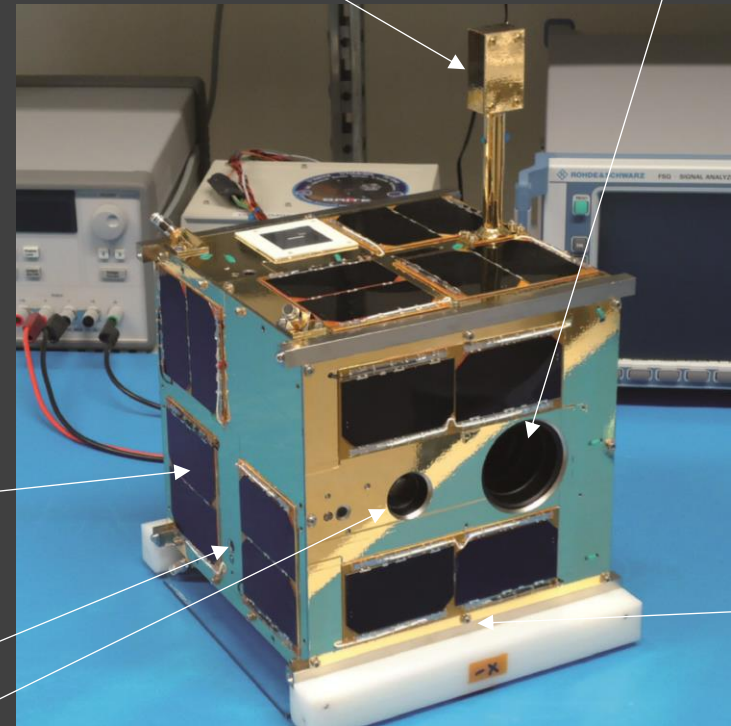
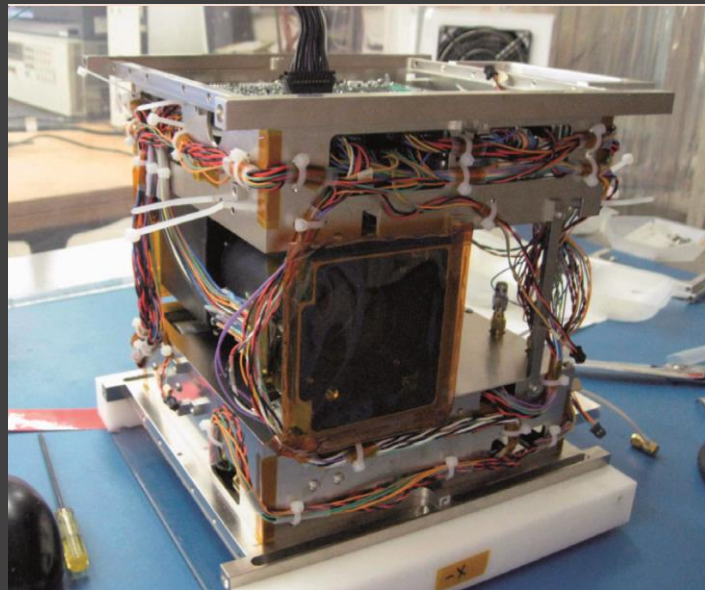
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BRITE – BRiGht Target Explorer



Solar Zellen

Sonnensensoren

Guiding Kamera

Magnetometer

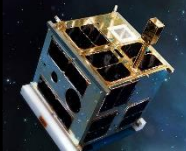
Hauptinstrument
3cm Öffnung

Schwungräder

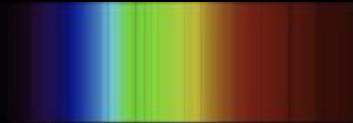
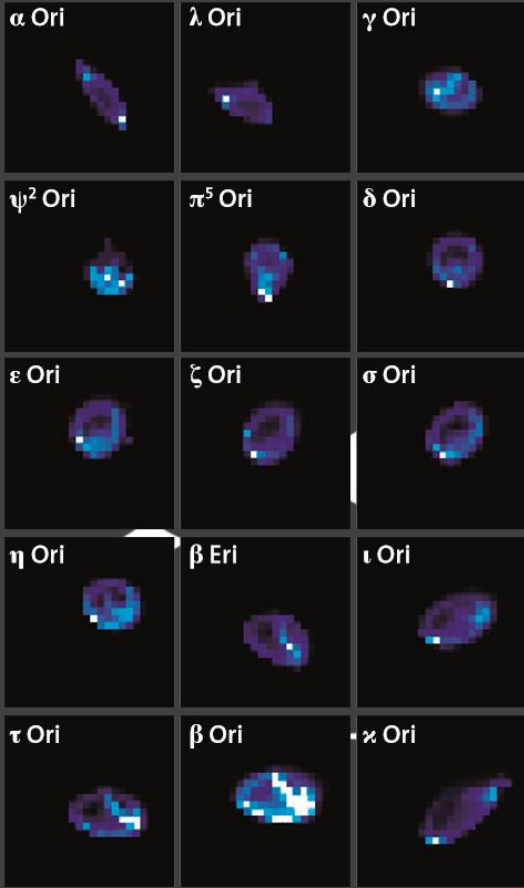
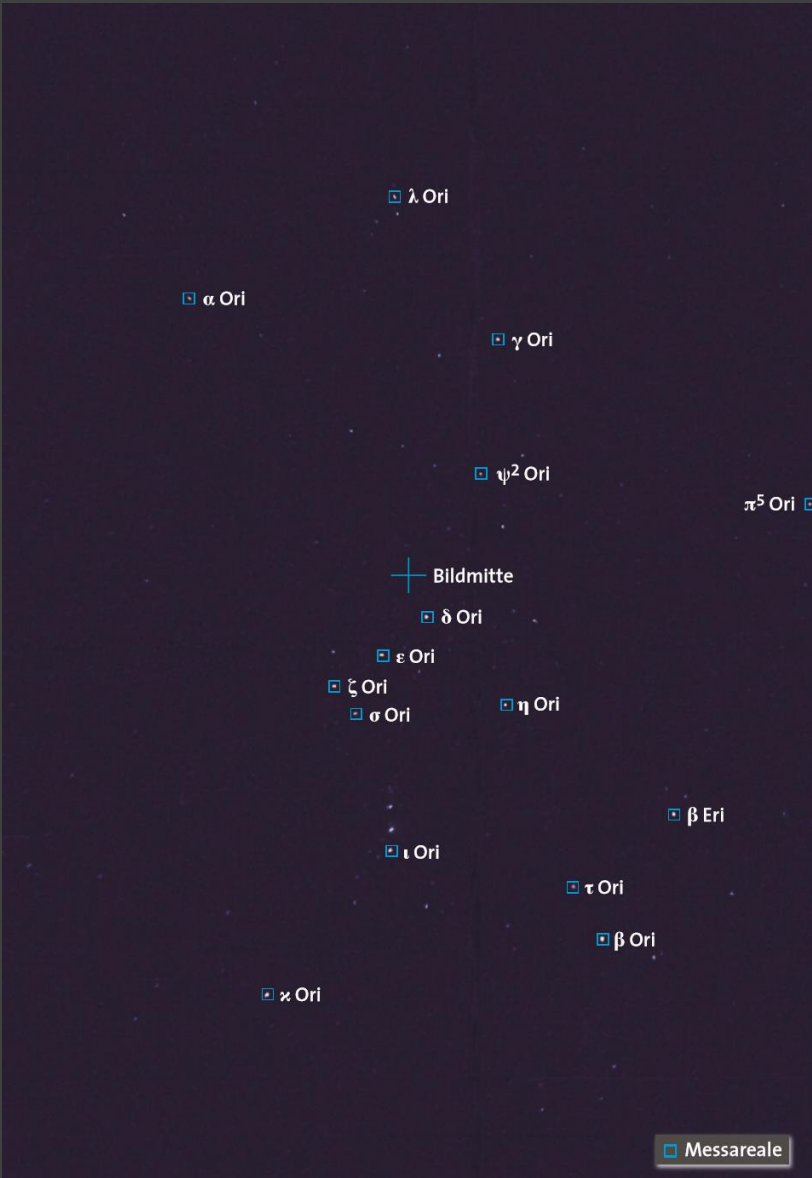
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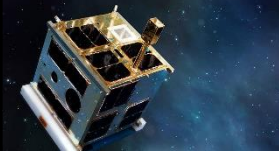
Aufnahmefeld 20° x 24°

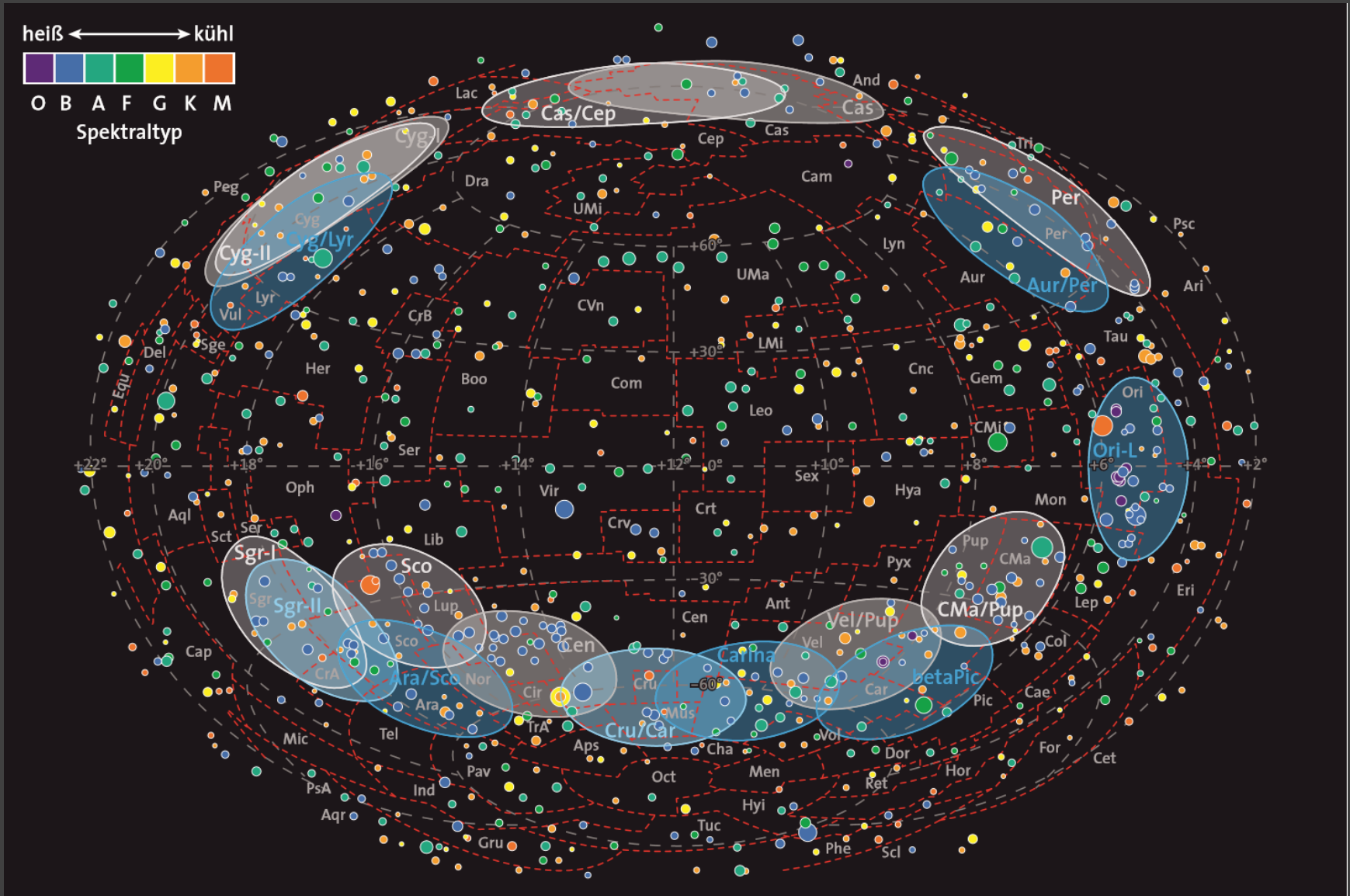


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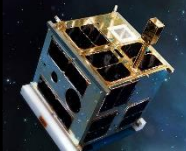




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Ela Zoclonka – Uni Warschau
Doktorandin forscht an Eps Per

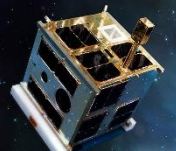
Gerald Handler– Uni Warschau
Forscht an pulsierenden Sternen



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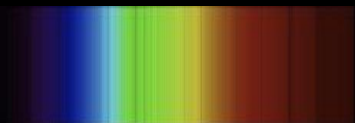
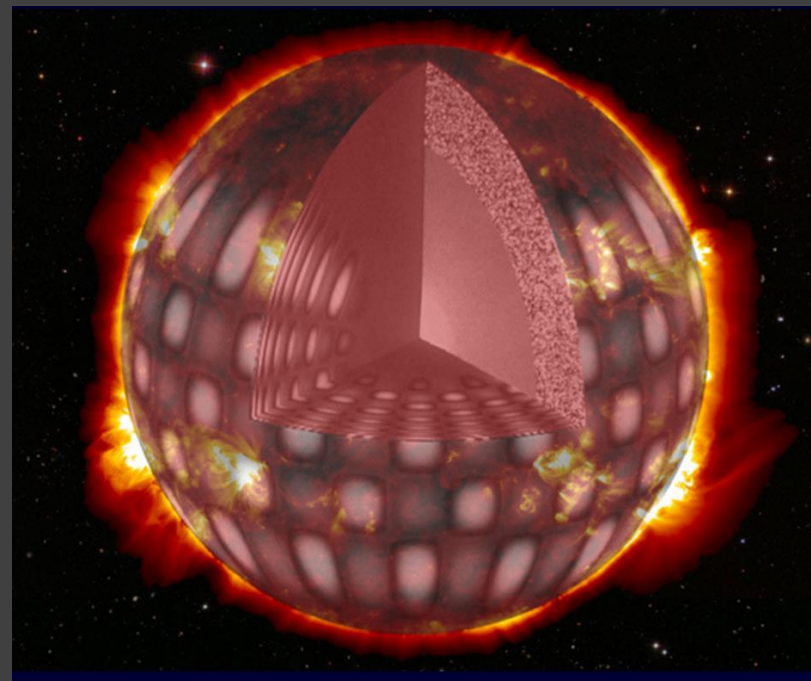


Epsilon Persei – B0.5 V

2.88 mag

640 ±30 Lichtjahre

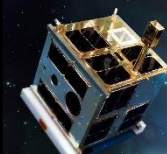
Doppelstern



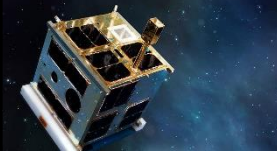
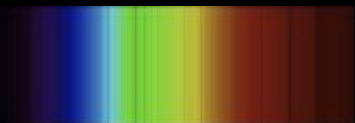
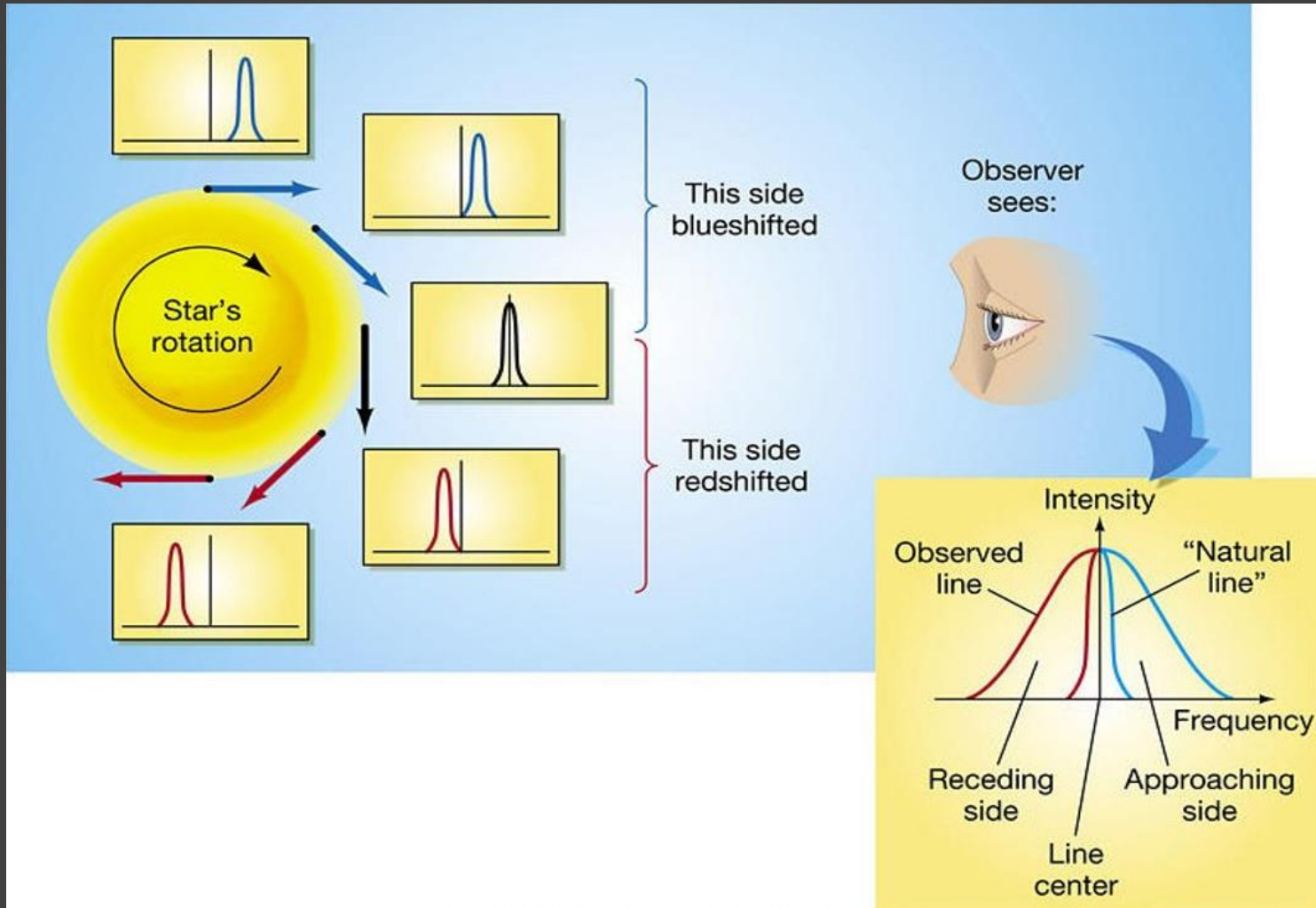
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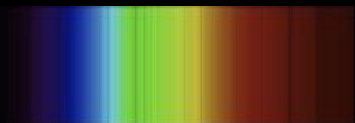
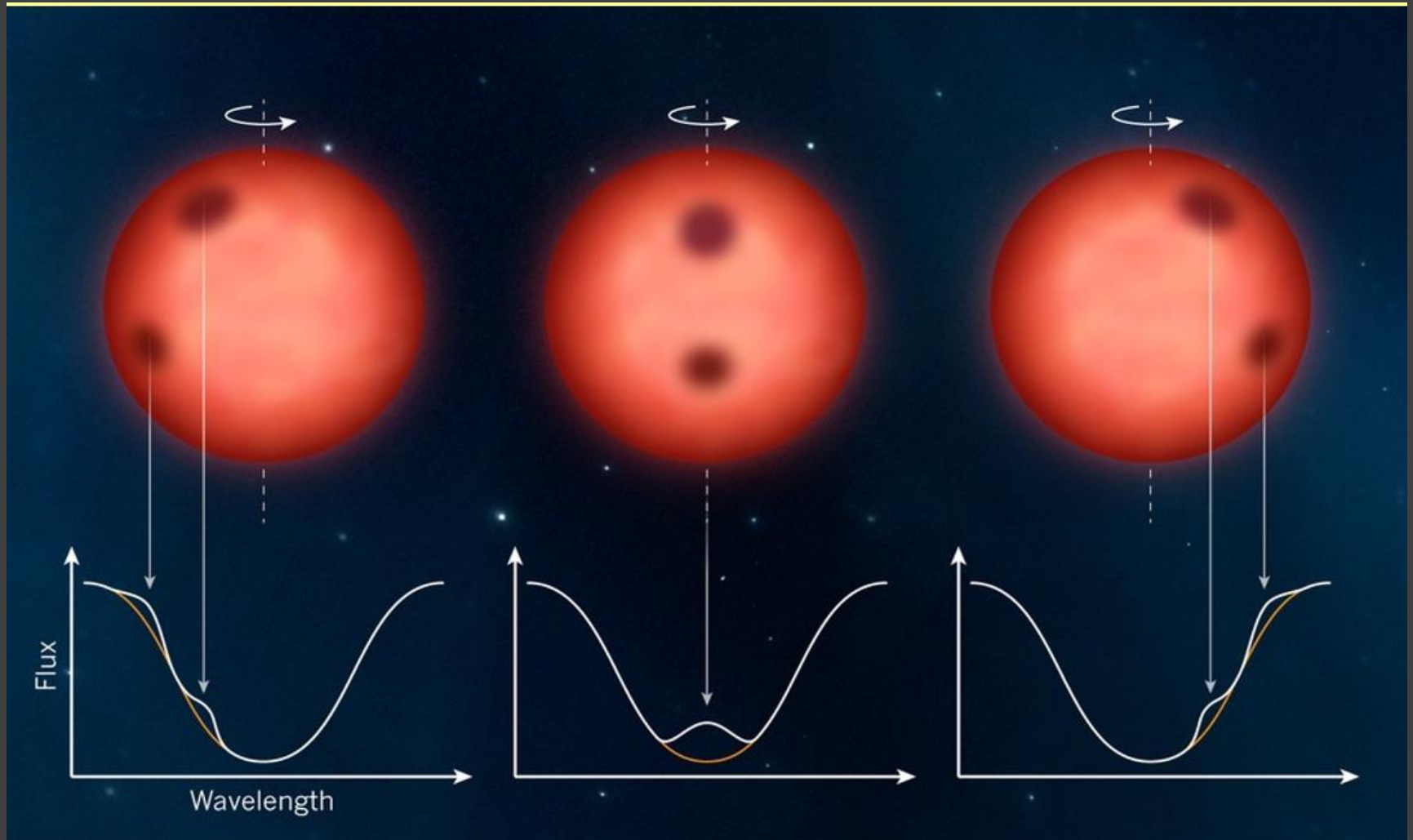
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Linienverbreiterung durch die Sternrotation



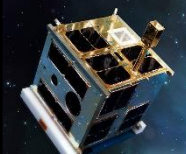
Linienverformung durch Sternflecken



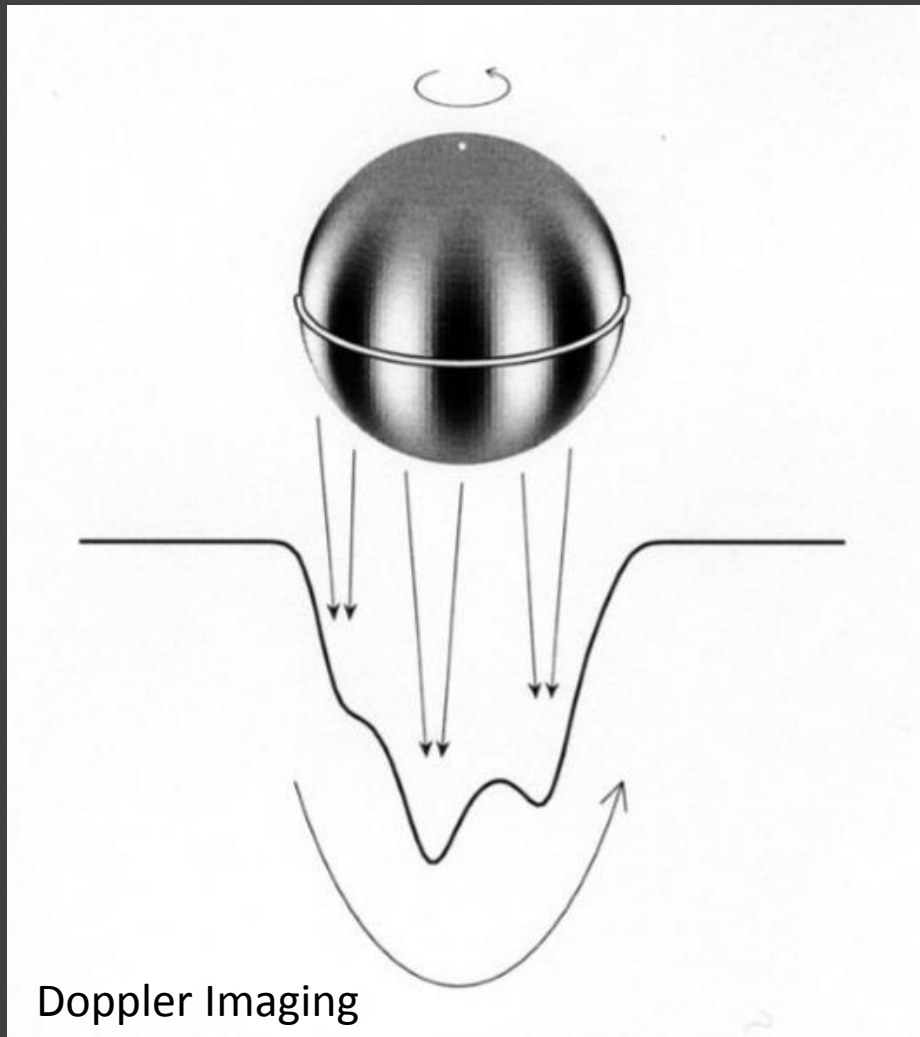
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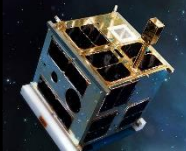
Linienvormung durch Pulsation



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Beispiele für pulsierende Oberflächen

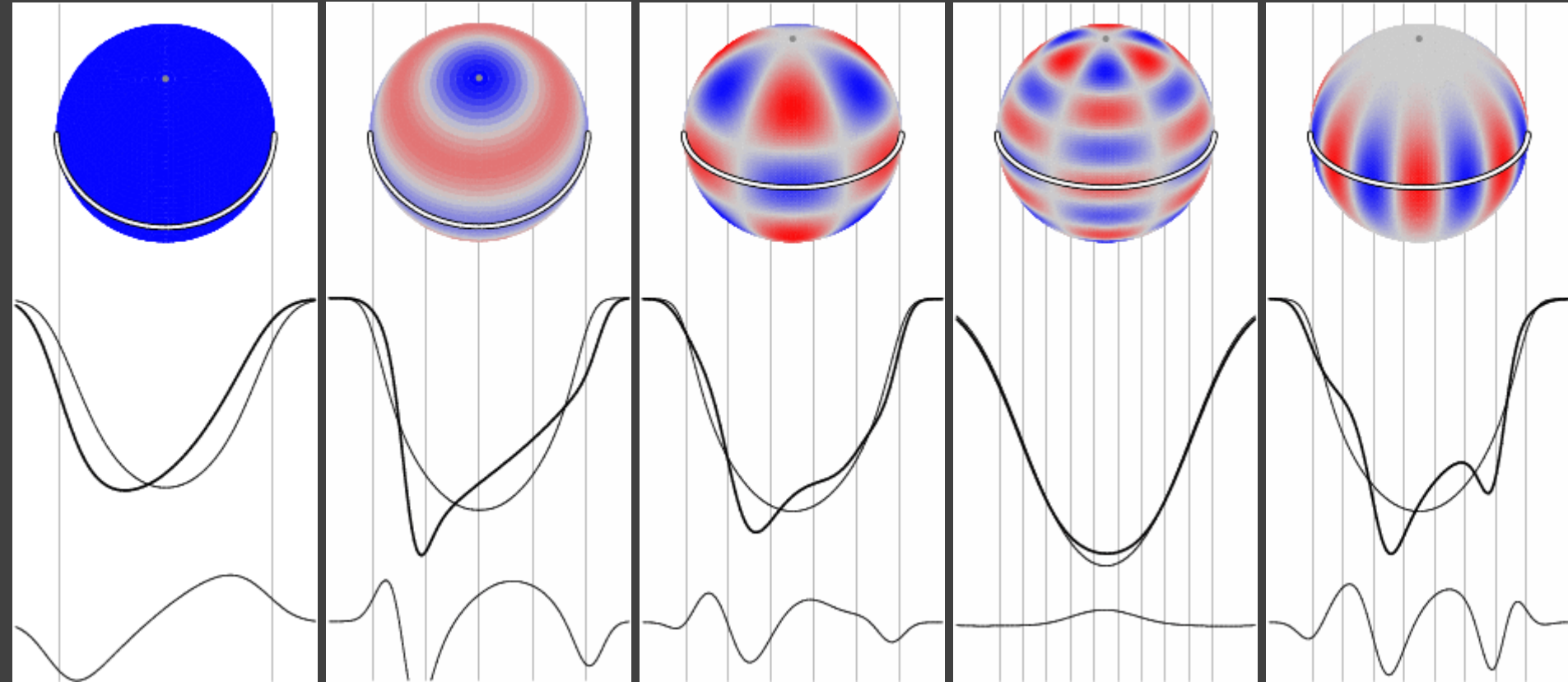
$l=0$ $m=0$
radial mode

$l=4$ $m=0$
zonal mode

$l=5$ $m=3$
prograde mode

$l=9$ $m=3$
retrograde mode

$l=7$ $m=7$
sectoral prograde

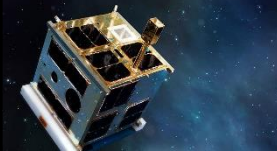


<http://staff.not.iac.es/~jht/science/>

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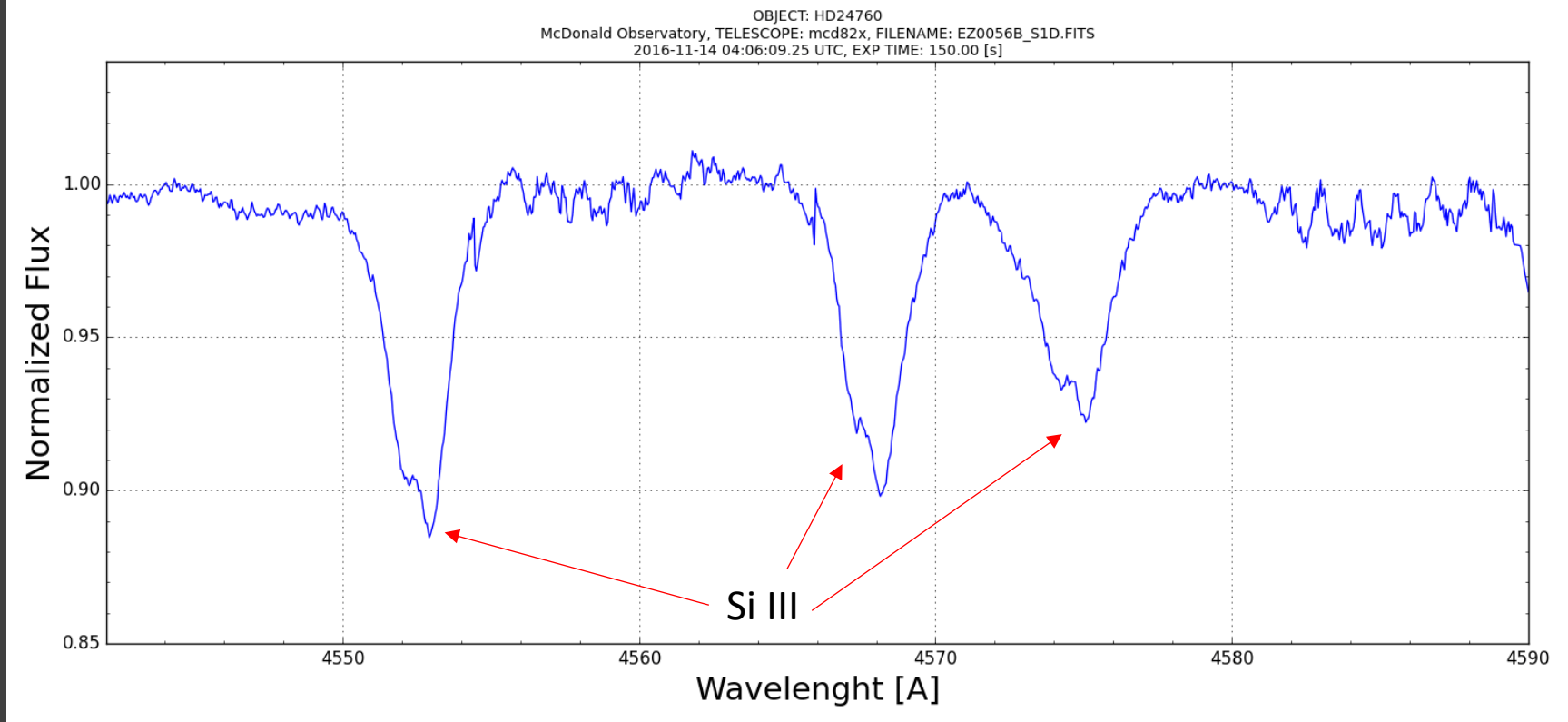
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Eps Per am 20.11.2016

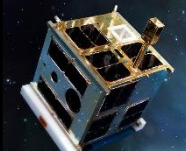
Aufnahme durch Ela Zoclonska am McDonald Observatorium
Sandiford Cassegrain Echelle Spectrometer, $R \sim 60000$
2,1m Otto Struve Teleskop, $f = 2800\text{mm}$



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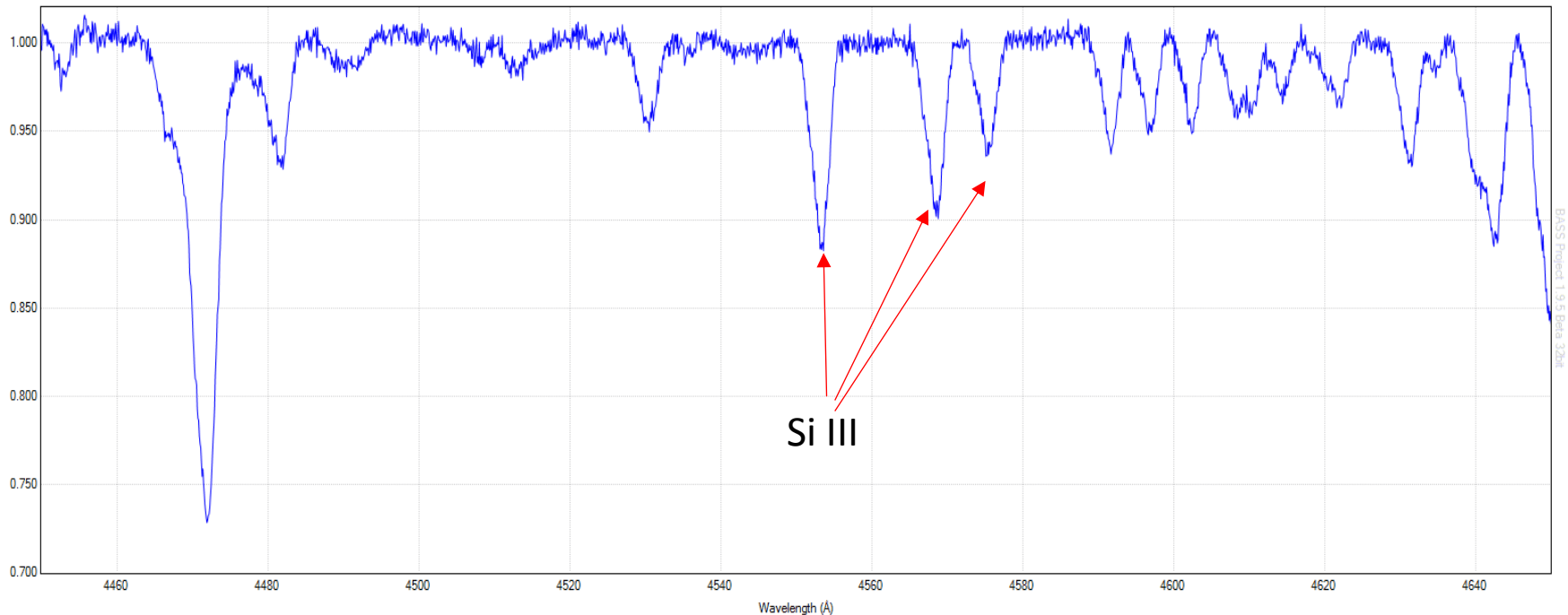
BAV-Veränderlichen-Beobachter-Treffen am 19. und 20. Mai 2017 in Hartha



Eps Per am 14.2.2017

35 Einzelaufnahmen je 8 Minuten Belichtungszeit
Wellenlängenkalibriert mittels ArNe Referenzlampe
Lhires III Spektrograph mit 2400 l/mm Gitter, 23u Spalt, $R \sim 11000$, $S/N > 250$
Kamera Sbig STT-8300, Guiding Sbig Sti
Aufnahmesoftware SbigControl
Teleskop Celestron C11, $f = 2800\text{mm}$

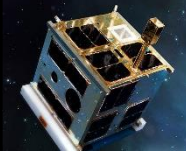
Epsilon Persei - B1.5III C - 2017-02-14, 19:10:45 - 00:10:08 UT
01: epsPer_20170214_191045.FIT



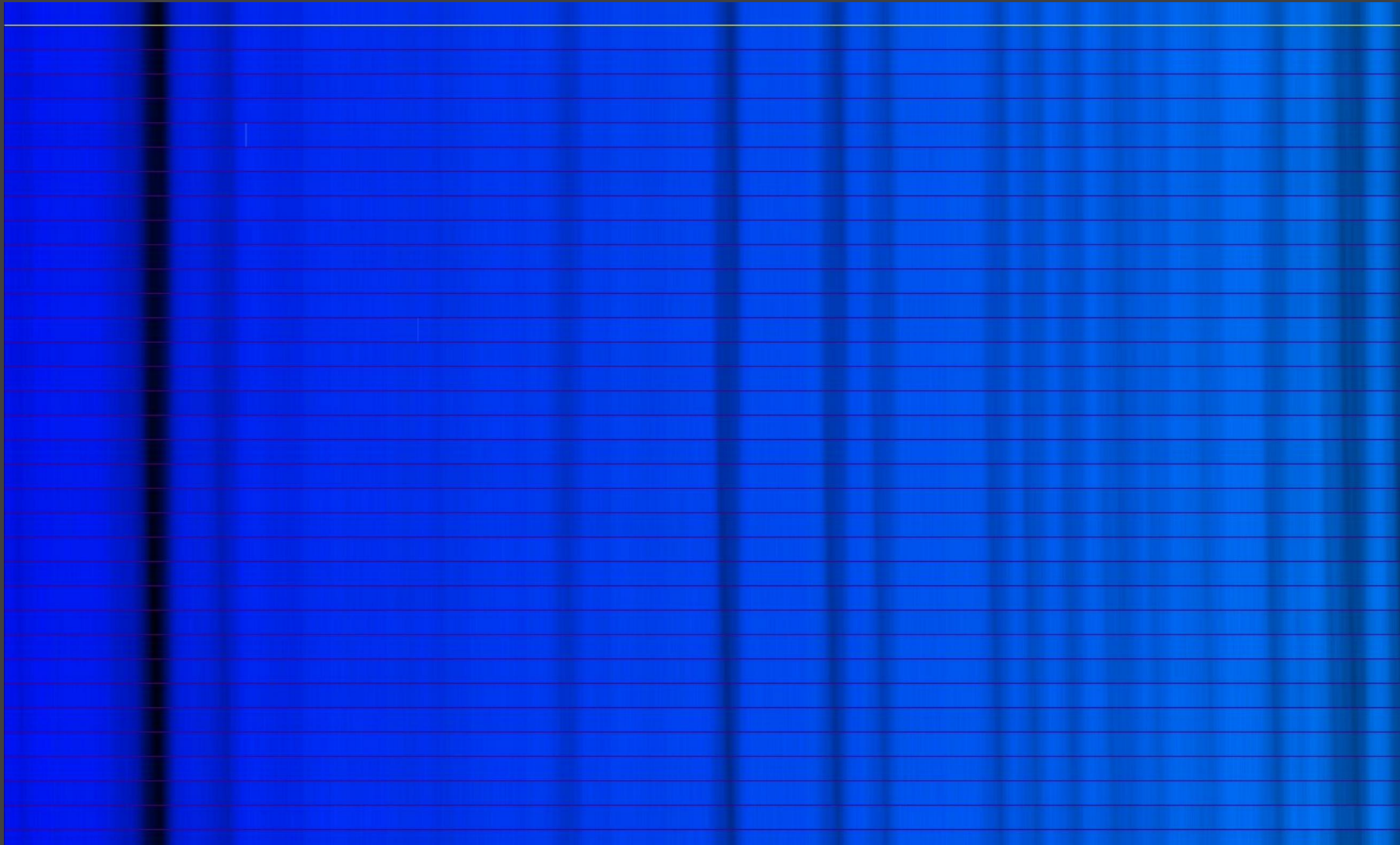
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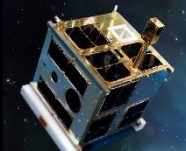
Eps Per am 14.2.2017

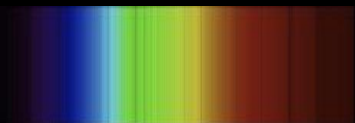
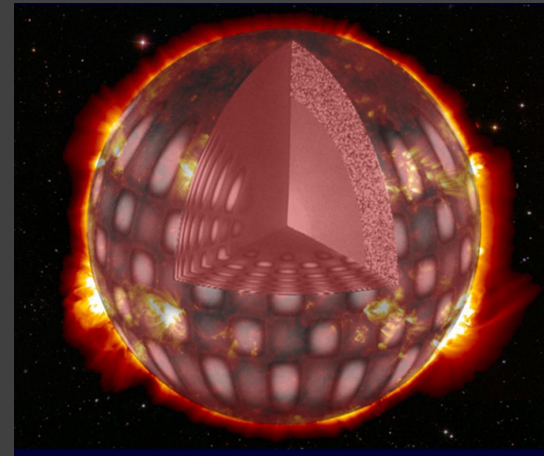
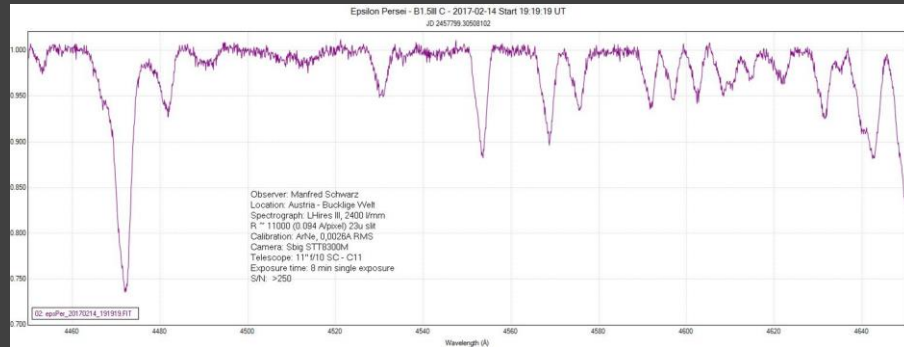
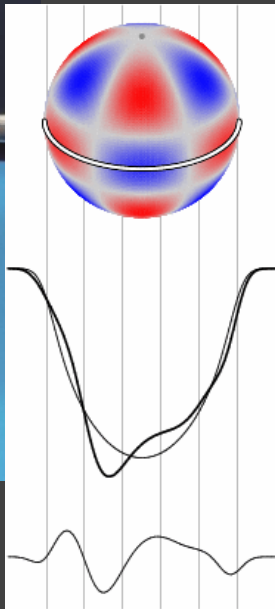
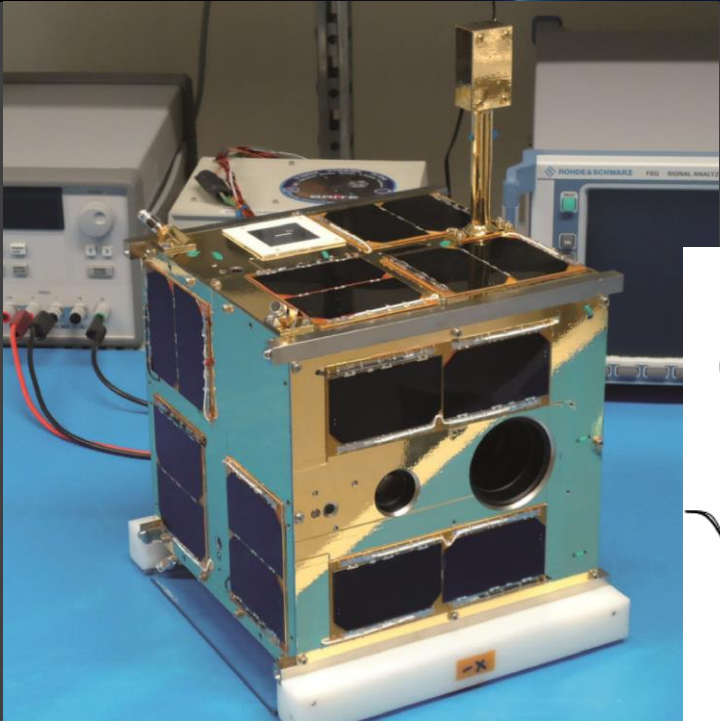


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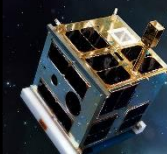




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Vielen Dank für Ihre Aufmerksamkeit!

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