

Education

- 2014 – 2018 **Ph.D. in Astrophysics**, U. of Amsterdam, The Netherlands. *Expected graduation: September 2018*
Supervisor: dr. Joeri van Leeuwen
Thesis title: *Young, hidden pulsars*
- 2012 – 2014 **M.Sc. in Astronomy and Astrophysics**, U. of Amsterdam, The Netherlands
Supervisors: dr. F. Tramper, prof. L. Kaper, and prof. A. de Koter
Thesis title: *A quantitative spectroscopic analysis of WR102 and WR142; investigating the nature of oxygen Wolf-Rayet stars*
- 2008 – 2012 **B.Sc. in Physics and Astronomy**, University of Amsterdam, The Netherlands
Supervisor: prof. H. F. Henrichs
Thesis title: *Determining the rotational velocity and inclination angle of early-type stars*

Publications

Refereed

- 1 **Straal, S. M.**; van Leeuwen, J., *A LOFAR search for steep-spectrum pulsars in supernova remnants and pulsar wind nebulae*, in prep.
- 2 **Straal, S. M.**; Connor, L.; van Leeuwen, J., *Observed Dispersion Excess in Wind Nebular and Supernova Remnant Pulsars: Possible Implications for FRBs*, 2018 ApJL submitted
- 3 **Straal, S. M.**; Gabanyi, K. E.; van Leeuwen, J.; Clarke, T. E.; Dubner, G.; Frey, S.; Giacani, E.; Paragi, Z., *HESS J1943+213: A Non-classical High-frequency-peaked BL Lac Object*, 2016 ApJ, 822, 117S [Cit:5]
- 4 Tramper, F.; **Straal, S. M.**; Sanyal, D.; Sana, H.; de Koter, A.; Gräfener, G.; Langer, N.; Vink, J. S.; de Mink, S. E.; Kaper, L., *Massive stars on the verge of exploding: the properties of oxygen sequence Wolf-Rayet stars*, 2015 A&A, 581A.110T Publication of M.Sc. project [Cit:16]

Unrefereed

- 1 **Straal, S. M.** 2014, *A quantitative spectroscopic analysis of WR102 and WR142; investigating the nature of oxygen Wolf-Rayet stars* (M.Sc. thesis), U. of Amsterdam, NL
<https://esc.fnwi.uva.nl/thesis/centraal/files/f1183078247.pdf>
- 2 **Straal, S. M.** 2012, *Determining the rotational velocity and inclination angle of early-type stars* (B.Sc. thesis), U. of Amsterdam, NL. <http://scriptiesonline.uba.uva.nl/scriptie/427192>

Observing Time and Other Awards

Proposals as PI

- 2016 LOFAR Proposal LC7 032: *Confirmation and timing of pulsar candidates from a targeted LOFAR search towards PWNe and SNRs*. **Straal, S. M.**; van Leeuwen, J. – Accepted, 12 hours
- 2016 LOFAR DDT proposal. DDT6 001: *Confirming the pulsar in the first discovered pulsar wind nebula in the Cygnus spiral arm*. **Straal, S. M.**; van Leeuwen, J. – Accepted, 6 hours
- 2014 LOFAR Proposal LC3 024: *A directed search for (high-velocity) pulsars in known supernova remnants and pulsar wind nebulae*. **Straal, S. M.**; van Leeuwen, J. – Accepted, 24 hours

Research funding

- 2017 LKBF travel funding, 840 euro, NL
- 2016 LKBF travel funding, 500 euro, NL
- 2016 Cartesius supercomputing time, 500.000 System Billing Units (SBU), equivalent to 5000 euro, NWO, NL

Awards

- 2017 Aspen Center Award, USD 500, US
- 2014 Runner up M.Sc. presentation prize, 125 euro, U. of Amsterdam, NL

Academic and Technical Skills

Programming	○ LaTeX (Advanced)	○ Python (Intermediate)	○ Bash (Intermediate)
Analysis	○ PRESTO (Intermediate)	○ PSRCRIVE (Beginner)	○ Mathematica (Beginner)
Operating Systems	○ Mac OS	○ Linux	○ Windows

Selected Conferences, Workshops, and Talks

2018	Seminar at the University of Oxford	Oxford, UK
2017	Contributed talk at 11th Bonn NS workshop	Bonn, DE
	Participant IAU Symposium 337: Pulsar Astrophysics - The next 50 Years	Manchester, UK
	Contributed talk at Fast Radio Bursts: New probes of Fundamental Physics & Cosmology	Aspen, US
2016	Seminar at ASTRON, Netherlands Institute for Radio Astronomy	Dwingeloo, NL
	Contributed talk at Workshop on Modelling Nebulae	Sant Cugat, ES
	Contributed talk at 71st Netherlands Astronomy Conference	Nunspeet, NL
	Contributed talk at LOFAR Science meeting	Zandvoort, NL
2015	Solicited talk at Bonn-Dwingeloo VLBI meeting	Dwingeloo, NL

Work Experience

- 2018 **Supervisor research project.** Designed and supervised a winter-term project of an undergrad exchange student (Oberlin College, USA). U. of Amsterdam, NL
- 2012 – 2016 **Teaching assistant** for the B.Sc. Observation Project, for five consecutive years.
Course taught to third-year Physics & Astronomy B.Sc. students, U. of Amsterdam, NL
- 2014 – 2015 **Teaching assistant** for the M.Sc. Observation Project using the Mercator telescope, La Palma.
Course taught to second-year Astronomy & Astrophysics M.Sc. students, U. of Amsterdam, NL
- 2012 – 2014 **Technical student assistant**, Anton Pannekoek Observatory, U. of Amsterdam, NL
- 2006 – 2014 **Teamleader**, Albert Heijn, Amstelveen, NL. Part of a management team with a department of ~ 150 employees. *Completed courses in leadership and communication*
- 2012 **Supervision assistant** of two observational astronomy B.Sc. projects (12EC), U. of Amsterdam, NL
- 2011 **Physics teacher intern**, obtained teachers degree in physics, Helen Parkhurst, Almere, NL

Academic Service

- 2017 **Nomination Advisory Commission member** to appoint a new Dean of the Faculty of Science, U. of Amsterdam, NL (~ 1500 employees and ~ 5000 students)
- 2015 – 2017 **Ph.D. and Postdoc council positions:**
 - **Chairperson** and council member Faculty of Science council, U. of Amsterdam, NL
 - **Intercouncil liaison and founding member** Anton Pannekoek Institute council, U. of Amsterdam, NL
- 2015 – 2017 **Ph.D. representative** at several evaluations:
 - 6-yearly evaluation of the NWO institute ASTRON (the Netherlands Institute for Radio Astronomy)
 - 5-yearly evaluation of the API (Anton Pannekoek Institute, U. of Amsterdam) and NOVA (Netherlands Research School for Astronomy)
 - Ph.D. Students on Science 2.0 at the KNAW (Royal Netherlands Academy of Arts and Sciences)
- 2016 **LOC member** 71st Netherlands Astronomy Conference 2016, U. of Amsterdam, NL

Outreach

- Invited popular talks U. of Amsterdam science podium (2016) and three at amateur observatories, 2017 – 2018, The Netherlands
- Activity Days Three astrophysics activity days for girls, 12 – 17 year in 2016 – 2017 and open day U. of Amsterdam 2014
- Stargazing activities 14 stargazing nights at U. of Amsterdam, 2012 – 2016. More than 30 guided tours of the Anton Pannekoek Observatory, U. of Amsterdam 2012 – 2017. Sidewalk Astronomy during SAIL Amsterdam, 2015

Media Appearances

(Mouseover for links in the digital PDF)

- 2016 Interview (Dutch) on Ph.D. project in Zenit, 3 pages
Expert video on the electromagnetic spectrum for Dutch high-school students
- 2014 Interview (Dutch) on the Anton Pannekoek Observatory, AT5: “Straten van Amsterdam”

Languages and Nationality

- Languages ○ Dutch (Native) ○ English (Fluent) ○ German (Basic)
- Nationality ○ Dutch
- Date of Birth ○ 22 September 1990