

Lieke van Son

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Research Positions

Assistant Professor - Tenure Track (current)

INSTITUTE FOR MATHEMATICS, ASTROPHYSICS AND PARTICLE PHYSICS | RADBOUD UNIVERSITY

Nijmegen, The Netherlands

Aug 2025 - present

Flatiron Research Fellow

CENTER FOR COMPUTATIONAL ASTROPHYSICS, FLATIRON INSTITUTE

New York, USA

Member of the Society of Fellows

PRINCETON UNIVERSITY

Princeton, USA

Lyman Spitzer, Jr. Postdoctoral Fellow

PRINCETON UNIVERSITY

Sept 2023 - Aug 2025

Sept 2023 - Aug 2025

International research internship

OBSERVATÓRIO NACIONAL - RIO DE JANEIRO

Rio de Janeiro, Brazil

Mar. 2017 - Jun 2017

Advisors: Prof. H Röttgering and Dr. R. A. Overzier, Subject: Probing radio galaxies with MG II absorbers

Education

Ph.D. in Astrophysics (Joint degree)

CENTER FOR ASTROPHYSICS | HARVARD & SMITHSONIAN – UNIVERSITY OF AMSTERDAM

Cambridge, USA – Amsterdam, NL

Jan. 2019 - Awarded May/Dec. 2023

Subject: The massive stellar progenitors of gravitational-wave sources

Advisors: Prof. S.E. de Mink & Prof. C. Conroy

MSc in Astronomy, specialisation: Cosmology

LEIDEN UNIVERSITY

Leiden, the Netherlands

Feb. 2016 - Awarded Jun. 2018

Advisors: Prof. J. Schaye and C. Barber MSc., Leiden University

Subject: Overmassive black holes in the C-Eagle Simulation

BSc in Astronomy

LEIDEN UNIVERSITY

Leiden, the Netherlands

Sep. 2012 - Awarded Jun. 2015

Grants, Awards, and Honors

- Research Grants and Fellowships -

Veni, NWO Talent Programme

Aug 2025

3-year personal grant awarded by the Dutch Research Council (NWO) to support independent, cutting-edge research at a Dutch institution; ~ €320K.

NASA Hubble Fellowship program (offer declined)

Sep. 2023- Sep. 2026

3-year fellowship supporting promising postdoctoral scientists to pursue independent research ~ \$225K

Flatiron Institute Pre-Doctoral fellowship

Sept 2021- Jan 2022

5-month PhD internship at the Center for Computational Astrophysics, NYC; incl. 3 months paid housing ~ \$7K

- Ph.D. Thesis Awards -

Barbara Bell Graduate Student Dissertation Fellowship

Spring 2023

Yearly thesis award from the Faculty of Arts and Sciences. Paid Harvard GSAS spring tuition: ~ \$5K

Finalist 2023 GWIC-Braccini Thesis Prize

August 2024

Yearly prize recognizing an outstanding Ph.D. thesis in the field of gravitational waves

- Teaching recognition -

Certificate of Distinction In Teaching, Derek Bok Center, Harvard University

June 2021

Rewarded based on graduate student evaluations of teaching.

Special Commendation Derek Bok Center, Harvard University

June 2020

For “special contributions to undergraduate teaching” based on student evaluations.

Selection of Invited Talks

I have given over 30 invited talks at conferences and colloquia. Notable invitations are highlighted below. The full list is on my website.

- May. 2027 [\(UPCOMING\) NEW HORIZONS SOLVAY LECTURES IN PHYSICS Lecture series](#) Solvay Institutes & Belgian universities
- Jun. 2026 [\(UPCOMING\) SCHOOL OF GRAVITY Invited Lecturer](#), Niels Bohr Institute, Copenhagen
- Jun. 2026 [\(UPCOMING\) MESA SUMMER SCHOOL Invited Lecturer](#), Wyoming, USA
- Feb. 2026 [KU LEUVEN Colloquium speaker](#), Institute of Astronomy , Leuven, Belgium
- Feb. 2026 [AMSTERDAM UNIVERSITY API UvA colloquium](#), Amsterdam, NL
- Nov. 2025 [KITP WORKSHOP ‘THE LIFECYCLE OF STELLAR BLACK HOLES’ Invited conference speaker](#), KITP, Santa Barbara
- Jun. 2025 [OPEN PROBLEMS IN ASTROPHYSICAL DYNAMICS](#) Invited speaker, Niels Bohr Institute, Copenhagen, Denmark
- Mar. 2025 [FRONTIERS OF ASTROPHYSICAL BLACK HOLES](#) Invited speaker, Sexten, Italy
- Mar. 2025 [PARTICLES VS. NEW PROBES WORKSHOP](#) Invited speaker, Center for Computational Astrophysics (CCA), New York City
- Dec. 2024 [THEORETICAL ASTROPHYSICS CENTER \(TAC\) SEMINAR](#) UC Berkeley, Berkeley, USA
- Nov. 2024 [CANADIAN INSTITUTE FOR THEORETICAL ASTROPHYSICS](#) CITA Seminar Toronto, Canada
- Nov. 2024 [UNIVERSITY OF PENNSYLVANIA](#) Astrophysics seminar, Philadelphia, USA
- Jun. 2024 [CURRENT THEMES IN THEORETICAL PHYSICS](#) [Invited review](#) talk, Niels Bohr International Academy , Denmark
- Jan. 2024 [UCLA Astrophysics colloquium](#), Los Angeles, USA
- Dec. 2023 [RESCEU-NBIA WORKSHOP ON GRAVITATIONAL-WAVE SOURCES](#) invited speaker and panellist, Tokyo, Japan
- Nov. 2023 [UNIVERSITY OF MARYLAND, BALTIMORE COUNTY](#) [physics colloquium](#), Baltimore, USA
- Jul. 2023 [MAX PLANCK INSTITUTE FOR ASTROPHYSICS KAVLI SUMMER PROGRAM](#) Invited Seminar, Munich, Ger.
- Jul. 2023 [CONFERENCE ‘3,2,1: MASSIVE TRIPLES, BINARIES AND MERGERS’](#) [Invited review](#) on populations in the GW context, Leuven
- Jun. 2023 [LORENTZ WORKSHOP:](#) [Invited review](#) on the mass distribution of merging binary black holes, Leiden, NL
- Apr. 2023 [APS APRIL MEETING 2023](#) [Invited review](#) , Physical Review Session on Gravitational Waves
- Nov. 2022 [PERIMETER INSTITUTE](#) Strong Gravity Seminar, Canada
- Sept. 2022 [AMERICAN MUSEUM OF NATURAL HISTORY](#) Seminar at Department of Astrophysics, USA
- Dec. 2021 [BLACK HOLE INITIATIVE - HARVARD UNIVERSITY](#) [BHI colloquium](#), USA. (recording of talk)
- Dec. 2021 [STATE UNIVERSITY OF NEW YORK COLLEGE - GENESEO](#) [Physics Colloquium](#), USA

Teaching experience

• Invited Lecturer for MESA summer school

June 2026

Main lecturer on ‘Binary stellar evolution with MESA’ at the 15th MESA Summer School edition. School is mainly aimed at graduate level and beyond (though not exclusive) – Wyoming, USA.

• Invited Lecturer: The School on Gravity

June 2026

Summer school for graduate students, asked to cover ‘Lectures on Black Holes and Neutron Stars’. - The Center of Gravity, Copenhagen, Denmark.

• MSc class: ‘Advanced Stellar and Binary Evolution’, Radboud University

Fall 2025

6 month course covering stellar structure, binary interactions and computational methods.

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One of two Lead instructors, Co-instructor: Dr. Onno Pols

• Hackathon: A first taste of MESA – IAU general assembly meeting - Lead instructor

Aug. 2024

Two-day hackathon in South Africa as part of the IAU general assembly. Geared towards both participants and local students. Material is now available online. - [Received AUI/IAU/Heising-Simons Scholarship for this hackathon](#)

• Graduate class: ASTRON 204 ‘Stellar Astrophysics’, Harvard University - Teaching Fellow

Fall 2021

Instructor: Prof. Charlie Conroy – [Received Certificate of Distinction in Teaching for this class](#)

• Undergraduate class: ASTRON 120 ‘Stellar Physics’, Harvard University - Teaching Fellow

Spring 2020

Instructor: Prof. Selma de Mink – [Received Special Commendation Derek Bok Center for this class](#)

• Masters class: ‘High energy astrophysics’, Amsterdam University - Teaching Assistant

Spring 2019

Instructor: Dr. Phil Uttley

• Bachelor class: ‘Modern Astronomical Research’, Leiden University - Teaching Assistant

Spring 2017

Instructor: Prof. Simon Portegies Zwart

Science Communication & Public Engagement

LEADERSHIP ROLES IN OUTREACH

[ComSciCon-flagship workshop 2022](#), Chair of Organising Committee **Lead team of 20 organisers** to realise Communicating Science workshop for graduate students in STEM. This includes setting up application process and reviewing applicants, **managing the \$ 60,000 workshop budget** and overseeing the workshop programming. (*September 2021 - September 2022*)

[ComSciCon Leadership Team](#), **Member** This science communication workshop for graduate students aims to empower future leaders in science communication. (*Jan 2020 - present*) Currently helping to establish relationships and funding with e.g., Harvard University to ensure long-term continuation of ComSciCon.

[Visitors centre Old Observatory, Leiden](#), **Exhibition Manager** Coordinator of the development of a new exhibition for the astronomy visitors' center. Apart from the main exhibition, this included organising and hosting many astronomy related outreach events, such as annual spring lectures and the night of discoveries. (*April 2016 - Jun 2018*)

[Astronomy on Tap](#), **Core organizer/Speaker** I (re) started 'Astronomy on Tap' series in Boston, which hosts free accessible, engaging science presentations on space and science aimed at the general public. (*Feb 2022 - June 2023*)

[Bring the sun to leiden](#), **Member of Public Relations Team** Successful project with the goal of buying and installing a heliostat used for public outreach. - Leiden University (*Jan 2015 - Apr 2015*)

Selection of outreach talks & events: Stand Up Science speaker @InScience Film Festival (March 2026), Proefstudeerdag Radboud (April 2026), Talk for German High-school students (October 2025), Faculty-wide talk '10 years of GWs' Radboud University (Sept. 2025), '[Symbiosis](#)' film was selected to be screened at 'Simons presents' event (June 2025), Speaker for female high-school students National Woman's day Cape Town South Africa (Aug. 2024), Invited lecture for "Sterrenkunde vereniging Triangulum" (October 2024), Speaker at Astronomy on Tap Boston (March 2023), TED-style talks for Harvard University-wide outreach event (Nov. 2022), Helped several high-school students with 'profielwerkstuk' (Jan. 2022), Speaker at Beacon Hill seminar series, Boston (Nov. 2021), 'Space in Your Living Room' Volunteer: online workshops for primary school children (Aug 2020), Numerous ($\gtrsim 50$) public tours at the Old Observatory Leiden (2015-2018), Stichting Rino - Physics Outreach Volunteer at high schools (2012-2016).

PRESS, POPULAR MEDIA AND PUBLICATIONS

[SYMBIOSIS](#) short film production, bringing together scientists and filmmakers. 2 week project, collaboration between filmmaker Kyle Finnegan and me to create the short film "Who Cares About Gravitational Waves?" - May 2025

[OP-ED SCIENTIFIC AMERICAN](#) Authored op-ed "We Just Discovered the Sounds of Spacetime. Let's Keep Listening" - August 2025

[DUTCH RADIO DR. KELDER & Co](#) ([NPO radio 1](#)) longer interview on research: "Zware sterren, zwarte gaten en nog zo wat" - Jan 2024, and shorter interview on PhD thesis "Zwarte gaten, je ziet ze nauwelijks, maar ze zijn er wel" - Sept 2023

[PODCAST: DANIEL AND JORGE EXPLAIN THE UNIVERSE](#) Hour-long interview for episode "Have we seen more or fewer gravitational waves than expected?" - Aug 2023

[SCIENTIFIC AMERICAN](#) Interviewed for article "Gravitational-Wave Search Resumes after Three Years and Lots of Headaches" - May 2023

[KJK MAGAZINE](#) Interviewed for article "Meest nabije zwarte gat ontdekt" - May 2020

Roles in Major Scientific Collaborations

The COMPAS team. As a member of the COMPAS team, I support and contribute to the development of the open-source rapid binary population synthesis code COMPAS (Compact Object Mergers: Population Astrophysics and Statistics). *I am co-author on both method paper I (Riley et. al 2022); and method paper II (Mandel et al. 2025).*

The Einstein Telescope collaboration. [Member of the ET Observational Science Board](#) Population Division, since May 2023

- Co-author of [Blue Book](#), Abac et al. (2025). One of the lead authors for Section 3.3 (Mass function of BHs and its evolution with redshift). Provided figures for Section 3.1 (formation channels of binary compact objects)
- Member of both the [high-redshift and intermediate-mass black hole task forces](#).

Cosmic Explorer Consortium. Contributed multiple science letters for the CE consortium, in response to the NSF MPSAC Subcommittee on Next-Generation Gravitational-Wave Observatories, co-authored on [Evans et al. 2023](#). Member since fall 2021

LISA Consortium. Member of the LISA Consortium since Fall 2021.

BlackGEM Member since Fall 2023

Professional Services & Institutional responsibilities

- Conference Leadership and Organization -

- KITP workshop: The Dynamic Lives and Deaths of Massive Stars - SOC member for conference March-April 2027
- Netherlands Astronomy Conference 2026 - SOC member May 2026
- 13th Belgian-Dutch Gravitational Wave Meeting - SOC member October 2025
- 10 years of GW's celebration at Radboud University 2024 - [Spearheaded and Organised](#) September 2025
- EAS annual meeting (session SS23a) - SOC member June 2025
- Workshop on Stable mass transfer 2.0 – [Lead Organiser](#) May 2025
Hackathon style follow-up meeting to successful workshop from the previous year.
- IAU General Assembly Focus Meeting 7 – SOC member Aug 2024
Focus meeting on “New Horizons at the interface between computational astrophysics and big data”
- Workshop on Stable mass transfer: from onset to remnants – [Lead Organiser](#) March 2024
Spearheaded the proposal, obtained funding, and designed the workshop together with 2 colleagues at the Flatiron institute.
- Gravitational Waves Physics and Astronomy Workshop 2024 - SOC member May 2024

- Selection of institutional responsibilities -

Member of Accessibility Subgroup CfA Inclusion, Diversity & Equity Alliance (Jul 2020 - Jul 2023)

The goal of the alliance is to improve equity, diversity, belonging, and inclusion through sustained actionable implementation.

External Panelist HST Time Allocation Panel in Stellar Populations. (spring 2023) Served twice, for Cycles 31 and 32

Arete Fellow Harvard Effective Altruism organization- 9-week fellowship, Link to Fellowship Details (Feb. 2021 - May. 2021)

Journal Referee Monthly Notices of the Royal Astronomical Society (MNRAS), The Astrophysical Journal (ApJ), Astronomy & Astrophysics (A&A), Physical Review journals, and Nature Astronomy

PhD promotie committee member: Lucas de Sá (University of São Paulo), Nicola Gaspari (Radboud University), Hyerin Jang (Radboud University), Karel Temmink (Radboud University), Caspar Bruenech (University of Amsterdam).

References

Name:	Prof. Dr. S. E. de Mink	Name	Prof. Dr. Charlie Conroy
Institute:	Max Planck Institute for Astrophysics, Garching GER	Institute	Center for Astrophysics, Harvard, Cambridge USA
Connection	PhD Thesis advisor	Connection	PhD Advisor at Harvard
Contact	sedemink@mpa-garching.mpg.de	Contact	cconroy@cfa.harvard.edu
Name	Prof. Dr. Will Farr	Name	Assistant Prof. Dr. Maya Fishbach
Institute	Stony Brook University and the Center for Computational Astrophysics, USA	Institute	Canadian Institute for Theoretical Astrophysics, University of Toronto, Canada.
Connection	Collaborator and Postdoctoral mentor	Connection	External collaborator
Contact	wfarr@flatironinstitute.org	Contact	fishbach@cita.utoronto.ca