

My interests and skills range from the field of astrophysics to instrumentation. Throughout my research, I design and build high-tech instruments for (ultra-)stable, high-resolution spectroscopy; silicon-based meta-materials; and study astrophysical processes underlying (exo-)planetary evolution. I enjoy the work on novel solutions for high-tech instrumentation to shed light on the laws that govern our Universe.

Personal Details

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Skills & Interests

Astrophysics
Instrumentation
Engineering
Optics/lithography
Informatics
Public speaking/outreach
Teaching
Leadership/project management
Graphic design

Languages

Dutch (native)
English (fluent)
German (proficient)
French (basic)

Programming & Software

Python
Zemax
COMSOL
Adobe Creative Cloud

Casper (C.C.) Farret Jentink

Curriculum Vitae

Academic Qualifications

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|--|----------------|
| ◦ Kapteyn Astronomical Institute - University of Groningen
BSc in Astronomy (7.1 out of 10 Dutch grade) | 2015 — 2018 |
| ◦ Kapteyn Astronomical Institute - University of Groningen
MSc in Astronomy (8.3 out of 10 Dutch grade) | 2018 — 2021 |
| ◦ Observatoire de Genève - Université de Genève
PhD in Astronomical Instrumentation & Astrophysics,
supervised by Prof. F. Pepe & Prof. C. Lovis | 2021 — present |

Awards, Distinctions & Grants

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| ◦ Beta Business Days Tech Start-up Award | 2021 |
| ◦ Kapteyn Science Day Award | 2021 |
| ◦ Alpbach Summer School award for the EXPOSURE mission | 2023 |
| ◦ SNF NCCR PlanetS Bonus Programme Grant (CHF 135,000) | 2023 |

Research Activity

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|---|----------------|
| ◦ Constructing the backend of the Kapteyn Interferometer for Short-baseline Solar observations | 2018 |
| ◦ Simulation & Evaluation of an Effective Dielectric Material for a Resonant Immersed Waveplate | 2020 |
| ◦ Project lead ABORAS: a polarimetric Sun-as-a-star telescope connected to HARPS3 | 2021 |
| ◦ Project lead NIGHT: Near-Infrared Gatherer of Helium Transits (Budget: ~CHF 700,000) | 2021 — present |

Professional Experience & Commissions of Trust

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| ◦ Astrophysics teacher
Boswell Beta | 08.2018 — 11.2018 |
| ◦ Jury member
GUF 100 Awards | 2019 |
| ◦ Research intern on micromachined dielectrics for SPICA/SAFARI
SRON / TU-Delft | 02.2020 — 07.2020 |
| ◦ Vice-Chairman & Commissioner of Internal Affairs | 09.2017 — 09.2018 |
| ◦ Chairman of the board (Budget: ~€20K, >250 members) | 09.2018 — 09.2019 |
| ◦ Member of the advisory board
Sirius A – the Study Association of Astronomy | 09.2019 — 09.2020 |
| ◦ Local Policy Coordinator on education & culture
VOLT Netherlands | 04.2021 — 08.2021 |
| ◦ First year mentor | 09.2019 — 03.2020 |
| ◦ Teaching assistant for the Evolving Universe course | 10.2020 — 01.2021 |
| ◦ Blaauw Observatory assistant | 02.2017 — 08.2021 |
| ◦ Kapteyn Mobile Planetarium operator | 04.2017 — 08.2021 |
| ◦ DOTLiveplanetarium operator
University of Groningen | 01.2018 — 08.2021 |
| ◦ Board member
JWG – Dutch youth association for astronomy | 10.2019 — 08.2021 |

Attended Conferences, Workshops & Events

(past year)

- | | | |
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| ◦ Extreme Precision Radial Velocity V | Santa Barbara, CA | April 2022 |
| ◦ Alpbach Summer School | Alpbach, Austria | Summer 2023 |
| ◦ Spectral Fidelity conference | Florence, Italy | September 2023 |
| ◦ Observing run at the EULER telescope | La Silla, Chile | September 2023 |

Publications

- See publications on my Git