

Education

9/20 - 8/24	PhD in astrophysics. Universities of Groningen (Netherlands) and Edinburgh (UK). Supervisors: Dr. Michiel Min, Dr. Inga Kamp, Dr. Paul I. Palmer.
9/17 - 9/19	MSc in astrophysics. University of Copenhagen (Denmark). Thesis: <i>TYC 2627-638-1: Two possible hot Jupiters in a triple star system.</i> Supervisor: Dr. Heidi Korhonen.
9/13 - 6/17	BSc in physics. Universidad Complutense de Madrid (Spain). Thesis: <i>Modelling of eclipsing binaries light curves.</i> Supervisor: Dr. Elisa de Castro Rubio.

Teaching Experience

9/22 - 4/23	Supervision of the MSc thesis ‘Machine learning emulation of exoplanet atmospheric radiative transfer’ by Lukas Nielsen. <i>University of Edinburgh.</i>
2020/21/23	TA for ‘Statistical Signal Processing’ by Dr. Leon Koopmans. <i>University of Groningen.</i>

Conferences and Meetings

3/21	Co-organiser of a machine learning hands-on session at the CHAMELEON school I.
9/21	European Planet Science Conference. <i>Machine learning as an ultra-fast alternative to Bayesian retrievals.</i>
11/21	NOVA network II meeting. <i>Machine learning as an ultra-fast alternative to Bayesian retrievals.</i>
6/22	SRON science days. <i>Interpreting exoplanet observations using machine learning.</i>

8/23	Seminar at UCLA. <i>This trick will make your retrievals 10× faster!</i>
9/23	PLATO workshop on 3D atmospheres and clouds. <i>Enabling self-consistent retrievals with machine learning in the JWST era.</i>

Observing proposals

2019	PI of the NOT Fast-track proposal 59-408.
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Collaborations

- Member of EXOMIRI (european exoplanet JWST/MIRI GTO team).
- Member of the PLATO work packages WP116 700 (clouds and atmosphere chemistry of exoplanets) and WP116 800 (3D climate of exoplanets).

Additional activities

- Organiser of the SRON exoplanet group meetings.
- Co-organiser of monthly joint meetings between the SRON and Leiden observatory exoplanet groups.
- Advertisement coordinator for the EPS Young Minds Groningen section.

Publications

- **Ardévol Martínez, F.** *et al.* Convolutional neural networks as an alternative to Bayesian retrievals for interpreting exoplanet transmission spectra. *A&A* 662, A108 (2022). https://ui.adsabs.harvard.edu/link_gateway/2022A&A...662A.108A/doi:10.1051/0004-6361/202142976
- Barrado Navascués, D., Mollière, P., Patapis, P., *et al.* $^{15}\text{NH}_3$ in the atmosphere of a cool brown dwarf. *Nature* (2023). <https://doi.org/10.1038/s41586-023-06813-y>
- Dyrek, A., Min, M., Decin, L. *et al.* SO_2 , silicate clouds, but no CH_4 detected in a warm Neptune with JWST MIRI. *Nature* (2023). <https://doi.org/10.1038/s41586-023-06849-0>
- **Ardévol Martínez, F.** *et al.* FlopPITy: enabling self-consistent exoplanet atmospheric retrievals with machine learning. *A&A* 681, L14 (2024). <https://doi.org/10.1051/0004-6361/202348367>