

Curriculum vitae

Personal information

Name	Anna Lueber
E-Mail	anna.lueber@unibe.ch anna.lueber@physik.uni-muenchen.de
Research Interests	<i>Brown Dwarfs, Atmospheric Retrievals, Bayesian Inference, Machine Learning</i>

Employment & Education

since 03/2022	Ph.D in Physics with the focus on Astronomy at the University of Bern (CSH), from 10/2022 onwards at the Ludwig Maximilian University (LMU) in Munich, <i>Supervisor: Prof. Dr. Kevin Heng</i>
11/2022	Certificate for Data Science Specialization, Johns Hopkins University
06/2022	Summer School in Astroinformatics II, Penn State University
03/2022	Master's diploma in Physics with special qualification in Astronomy at the University of Bern, Overall grade: summa cum laude
09/2020 – 02/2022	MSc in Physics with special qualification in Astronomy at the University of Bern
06/2021	Summer School in Statistics for Astronomers, Penn State University
02/2021	Certificate for Machine Learning course, Stanford University
03/2019 – 08/2019	Semester abroad at the Humboldt University Berlin (ERASMUS-SEMP)
09/2020	Bachelor's diploma in Physics with special qualification in Astronomy at the University of Bern, Overall grade: cum laude
09/2017 – 09/2020	BSc in Physics with special qualification in Astronomy at the University of Bern

Institutional Work

since 04/2023	Teaching Assistant at LMU Munich with Prof. Dr. Kevin Heng
since 02/2022	Co-Leader of Twinkle's Brown Dwarf Characterisation Working Group
09/2020– 12/2022	Teaching Assistant University of Bern with Prof. Dr. Nicolas Thomas
02/2020 – 08/2020	Teaching Assistant University of Bern with Prof. Dr. Thomas Feurer
09/2019 – 12/2021	Vice president of the Young Physicists Forum
09/2017 – 02/2022	Member of the student council Physics and Astronomy

Talks & Posters

10/2023	Invited talk at SSAA General Assembly, Geneva, Switzerland
03/2023	Contributed talk at Cloud Academy 3, Les Houches, France
01/2023	Contributed talk and poster at Cloud2Con, Ringberg, Germany

07/2022	Contributed talk and poster at Cool Stars 21, Toulouse, France
05/2022	Poster at Exoplanets IV, Las Vegas, USA
04/2022	Invited Talk at Twinkle's Next Gen European Extrasolar Scientists Meeting
04/2022	Poster at Junior Research Assembly (JURA), Leissigen, Switzerland

Funding

11/2022	SSAA MERAC Funding and Travel Award (5000 CHF)
05/2022	SSAA Travel grant (1200 CHF)

Publications

6. **Lueber, A.**, Novais, A., Fisher, C., & Heng, K. (2024). Information content of JWST spectra of WASP-39b. arXiv preprint arXiv: 2405.02656.
5. Petrus, S., Whiteford, N., Patapis, P., [...], **Lueber, A.**, [...] & Zhou, Y. (2024). The JWST Early Release Science Program for Direct Observations of Exoplanetary Systems V. Do Self-consistent Atmospheric Models Represent JWST Spectra? A Showcase with VHS 1256-1257 b. *ApJL*, 966, L11.
4. **Lueber, A.**, Kitzmann, D., Fisher, C. E., Bowler, B. P., Burgasser, A. J., Marley, M., & Heng, K. (2023). Intercomparison of Brown Dwarf Model Grids and Atmospheric Retrieval Using Machine Learning. *ApJ*, 954, 22.
3. Franson, K., Bowler, B. P., Bonavita, M., Brandt, T. D., Chen, M., Samland, M., Zhang, Z., **Lueber, A.**, Heng, K., Kitzmann, D., Wolf, T., Jones, B. A., Tran, Q. H., Bardalez Gagliuffi, D. C., Biller, B., Chilcote, J., Crepp, J. R., Dupuy, T. J., Faherty, J., Fontanive, C., Groff, T. D., Gratton, R., Guyon, O., Jensen-Clem, R., Jovanovic, N., Kasdin, N. J., Lozi, J., Magnier, E. A., Mužić, K., Sanghi, Aniket, Theissen, C. A. (2023). Astrometric Accelerations as Dynamical Beacons: Discovery and Characterization of HIP 21152 B, the First T-dwarf Companion in the Hyades. *AJ*, 165, 39.
2. Kitzmann, D., Hoeijmakers, J. H., Grimm, S. L., Borsato, N. W., **Lueber, A.**, & Prinoth, B. (2023). The Mantis Network. A standard grid of templates and masks for cross-correlation analyses of ultra-hot Jupiter transmission spectra. *A&A*, 669, 113.
1. **Lueber, A.**, Kitzmann, D., Bowler, B. P., Burgasser, A. J., & Heng, K. (2022). Retrieval Study of Brown Dwarfs Across the L-T Sequence. *ApJ*, 930, 136.