

Curriculum Vitae

Lea Sophia Schimak, MSc

Born
Citizenship

May 6, 1997
Austria

Academic Education

2023 – now	The University of Sydney, Australia : Doctor of Philosophy (School of Physics)
2021 – 2023	Karl Franzens University Graz, Austria : Master of Physics with specialisation in Astrophysics (Graduation: August, 16, 2023), Title of Thesis: <i>Towards a differential seismic modeling analysis of the double Red-Giant binary system KIC 10841730 using MESA and GYRE</i>
2015 – 2021	Karl Franzens University Graz, Austria : Bachelor of Physics (Graduation: January, 04, 2021), Title of Thesis: <i>Modulation of the tidal evolution of the orbit and stellar rotation of binary systems with MESA</i>

Conference Contributions

10-15 Jul,	2022	9th TESS/16th Kepler Asteroseismic Science Consortium Workshop in Leuven, Belgium, Title of Poster presented: <i>Differential seismic modelling of double Red-Giant binary systems using MESA and GYRE</i>
15-19 Jul,	2024	8th TESS/15th Kepler Asteroseismic Science Consortium Workshop in Porto, Portugal, Title of Poster presented: <i>Spectroscopy and Asteroseismic Modelling of the Red Giant Binary System KIC 10841730</i>
7-11 Jul,	2025	9th TESS/16th Kepler Asteroseismic Science Consortium Workshop in Klosterneuburg, Austria, Title of contributed talk: <i>The asteroseismic binary KIC 10841730: What does it tell us about core helium-burning red clump star models?</i>

Summer/Winter Schools

21-25 Jul,	2025	TA at the MESA Summer School 2025 in Leuven, Belgium
21-26 Jul,	2024	Porto Summer School on Asteroseismology "From Pixels to Stellar Ages" in Vila do Conde, Portugal
17-21 Jun,	2024	"MESA Down Under" in Sydney, Australia
19-23 Jun,	2023	PHOEBE workshop at the University of Ljubljana, Slovenia
28 Aug - 3 Sep,	2022	International School of Astrophysics "Live and Death: From Stars to Compact Objects" in Asiago, Italy. Scholarship granted.
20 May,	2022	LOC member at the IAU NAEC Symposium "Schule und Weltraum" (School and Space) in Austrian Academy of Sciences, Vienna, Austria
09-20 Aug,	2021	Virtual attendance of the MESA Summer School at the University of California, Santa Barbara

24-27 Feb,	2020	LOC member at the "Red Giant Asteroseismology Workshop" at the University of Graz, Austria
10-12 Oct,	2019	"MESA Workshop" in Bairisch Kölldorf, Austria (Graz Univ.)

Work experience

2024 – now	Tutor and Lab Demonstrator at the University of Sydney for physics Bachelor students
2018 – 2023	Tutoring at Lehrwerkstätte Buntspecht, an apprenticeship workshop for teenagers from challenging backgrounds and/or with learning difficulties, Ebensee, Austria

Refereed and submitted Publications

Lea S. Schimak; Timothy R. Bedding; Courtney L. Crawford; Paul G. Beck; Yaguang Li; Daniel Huber; Joel Ong; Benjamin T. Montet; May Gade Pedersen; Desmond H. Grossmann; Savita Mathur; Rafael A. García; **Testing Red Clump Models with the Asteroseismic Binary KIC 10841730**; submitted to Monthly Notices of the Royal Astronomical Society

D. Godoy-Rivera; S. Mathur; R. A. García; M. H. Pinsonneault; Â. R. G. Santos; P. G. Beck; D. H. Grossmann; **L. Schimak**; M. Bedell; J. Merc et al. (Apr. 2025); **Kepler meets Gaia DR3: Homogeneous extinction-corrected color-magnitude diagram and binary classification**; Astronomy & Astrophysics, Volume 696, id.A243, 24 pp.

D. H. Grossmann; P. G. Beck; S. Mathur; C. Johnston; D. Godoy-Rivera; J. C. Zinn; S. Cassisi; B. Liagre; T. Masseron; R. A. García; A. Hanslmeier; N. Muntean; **L. S. Schimak**; L. Steinwender; D. Stello (Apr. 2025); **Improving the stellar age determination through joint modeling of binarity and asteroseismology: Grid modeling of the seismic red giant binary KIC 9163796**; Astronomy & Astrophysics, Volume 696, id.A42, 17 pp.

P. G. Beck, D. H. Grossmann, L. Steinwender, **L. S. Schimak**, N. Muntean, M. Vrad, R. A. Patton, J. Merc, S. Mathur, R. A. Garcia, M. H. Pinsonneault, D. M. Rowan, P. Gaulme, C. Allende Prieto, K. Z. Arellano-Córdova, L. Cao, E. Corsaro¹, O. Creevey, K. M. Hambleton, A. Hanslmeier, B. Holl, J. Johnson, S. Mathis, D. Godoy-Rivera, S. Símon-Díaz, and J. Zinn (Feb. 2024); **Constraining stellar and orbital co-evolution through ensemble seismology of solar-like oscillators in binary systems. A census of oscillating red giants and dwarf stars in Gaia DR3 binaries**; Astronomy & Astrophysics, Volume 682, id.A7, 27 pp.