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Published/accepted works (15 total, 5 first author)

16. Schneider, F., **Lau, M.**, Röpke, F., 2024, *Stellar mergers and common-envelope evolution*, invited chapter for the Encyclopedia of Astrophysics to be published by Elsevier, [PDF](#)
15. **Lau, M.**, Cantiello, M., Jermyn, A., MacLeod, M., Mandel, I., et al., 2025, *Hot Jupiter engulfment by a red giant in 3D hydrodynamics*, A&A, 694, A264, [PDF](#)
14. Siess, L., Bermúdez-Bustamante, L., De Marco, O., Price, D., González-Bolívar, M., et al. (inc. **Lau, M.**), 2024, *Dusty Common Envelope Evolution*, Galaxies, 12, [PDF](#)
13. Vetter, M., Röpke, F., Schneider, F., Pakmor, R., Ohlmann, S., et al. (inc. **Lau, M.**), 2024, *From spherical stars to disk-like structures: 3D common-envelope evolution of massive binaries beyond inspiral*, A&A, 691, [PDF](#)
12. Bermúdez-Bustamante, L., De Marco, O., Siess, L., Price, D., González-Bolívar, M., et al. (inc. **Lau, M.**), 2024, *Dust formation in common envelope binary interactions - II: 3D simulations with self-consistent dust formation*, MNRAS, 533, 1, [PDF](#)
11. **Lau, M.**, Hirai, R., Mandel, I., Tout, C., 2024, *Expansion of Accreting Main-sequence Stars during Rapid Mass Transfer*, ApJL, 966, 1, [PDF](#)
10. Amaro-Seoane, P., Andrews, J., Arca Sedda, M., Askar, A., Baghi, Q., et al. (inc. **Lau, M.**), 2023, *Astrophysics with the Laser Interferometer Space Antenna*, Living Reviews in Relativity, 26, 1, [PDF](#)
9. Renzo, M., Zapartas, E., Justham, S., Breivik, K., **Lau, M.**, et al., 2023, *Rejuvenated Accretors Have Less Bound Envelopes: Impact of Roche Lobe Overflow on Subsequent Common Envelope Events*, ApJL, 942, 2, [PDF](#)
8. González-Bolívar, M., De Marco, O., **Lau, M.**, Hirai, R., Price, D., et al., 2022, *Common envelope binary interaction simulations between a thermally pulsating AGB star and a low mass companion*, MNRAS, 517, 3, [PDF](#)
7. **Lau, M.**, Hirai, R., Price, D., Mandel, I., 2022, *Common envelopes in massive stars II: The distinct roles of hydrogen and helium recombination*, MNRAS, 516, 4, [PDF](#)
6. **Lau, M.**, Hirai, R., González-Bolívar, M., Price, D., De Marco, O., et al., 2022, *Common envelopes in massive stars: towards the role of radiation pressure and recombination energy in ejecting red supergiant envelopes*, MNRAS, 512, 4, [PDF](#)
5. Riley, J., Agrawal, P., Barrett, J., Boyett, K., Broekgaarden, F., et al. (inc. **Lau, M.**), 2022, *Rapid Stellar and Binary Population Synthesis with COMPAS*, ApJS, 258, 2, [PDF](#)
4. Compas, T., Riley, J., Agrawal, P., Barrett, J., Boyett, K., et al. (inc. **Lau, M.**), 2022, *COMPAS: A rapid binary population synthesis suite*, The Journal of Open Source Software, 7, 69, [PDF](#)
3. Ackley, K., Adya, V., Agrawal, P., Altin, P., Ashton, G., et al. (inc. **Lau, M.**), 2020, *Neutron Star Extreme Matter Observatory: A kilohertz-band gravitational-wave detector in the global network*, Publications of the Astronomical Society of Australia, 37, [PDF](#)
2. **Lau, M.**, Mandel, I., Vigna-Gómez, A., Neijssel, C., Stevenson, S., et al., 2020, *Detecting double neutron stars with LISA*, MNRAS, 492, 3, [PDF](#)

Submitted works (1 total)

1. Bermúdez-Bustamante, L., De Marco, O., Siess, L., Price, D., González-Bolívar, M., et al. (inc. **Lau, M.**), 2024, *Dust formation during the interaction of binary stars by common envelope*, Proceedings IAU Symposium No. 384, [PDF](#)