

# From atomic physics, to upper-atmospheric chemistry, to cosmology: A “laser photometric ratio star” to calibrate telescopes at major observatories

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## Abstract

This Research Highlight showcases the two Research Papers entitled, A precise photometric ratio via laser excitation of the sodium layer – I. One-photon excitation using 342.78 nm light, <https://doi.org/10.1093/mnras/stab1621> and A precise photometric ratio via laser excitation of the sodium layer – II. Two-photon excitation using lasers detuned from 589.16 nm and 819.71 nm resonances, <https://doi.org/10.1093/mnras/stab1619>.

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  - i ) ALTAIR Collaboration **2022** (<http://projectaltair.org>);
  - ii ) ORCASat Collaboration **2022** (<https://orcasat.ca>); and,
  - iii ) ORCAS Project **2022** (<https://asd.gsfc.nasa.gov/orcas/>).
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