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, \url{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, \url{https://doi.org/10.1093/mnras/stab1619}.

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\begin{itemize}
  \item \textsuperscript{i}) ALTAIR Collaboration \textbf{2022} (\url{http://projectaltair.org});
  \item \textsuperscript{ii}) ORCASat Collaboration \textbf{2022} (\url{https://orcasat.ca}); and,
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