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Laser Spectroscopy of Trapped Ions

Absolute frequency measurement of the $^2S_{1/2} \rightarrow {}^2F_{7/2}$ optical clock transition in $^{171}Yb^+$ with an uncertainty of 4×10^{-16} using a frequency link to international atomic time

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Abstract

The highly forbidden 2S1/2→2F7/2 electric octupole transition in 171Yb+ is a potential candidate for a redefinition of the SI second. We present a measurement of the absolute nk to Internati b+ optical frequenc lute frequen ncertainty of 4. ement, which w standards.

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Notes

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Additional information

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