

453 Views | 29 CrossRef citations to date | 1 Altmetric

Laser Spectroscopy of Trapped Ions

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

Charles F. A. Baynham, Rachel M. Godun, Jonathan M. Jones, Steven A. King, Peter B. R. Nisbet-Jones, Fred Baynes, ...show all

Pages 585-591 | Received 30 Jun 2017, Accepted 06 Sep 2017, Published online: 06 Oct 2017

Cite this article <https://doi.org/10.1080/09500340.2017.1384514>

Check for updates

Sample our Physical Sciences Journals >> Sign in here to start your access

**We Care About Your Privacy**

We and our 891 partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting I Accept enables tracking technologies to support the purposes shown under we and our partners process data to provide. Selecting Reject All or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the Show Purposes link on the bottom of the webpage. Your choices will have effect within our Website. For more details, refer to our Privacy Policy. [Here](#)

We and our partners process data to provide:

- Use precise geolocation data. Actively scan device

**I Accept** **Reject All** **Show Purpose**



Full Article, Reprints

Abstract, The high... candidate... absolute... International... frequency... frequency... of  $4.0 \times 10^{-16}$ ... which w... Keywords

a potential... the... link to...  $^{171}\text{Yb}^+$  optical... lute... uncertainty... ment... standards.

! View correction statement:

[Publisher's Note](#)

## Acknowledgements

We thank Peter Whibberley for helpful discussions and E. Anne Curtis for critical review of the manuscript prior to submission. We also note that our absolute frequency measurement derives its accuracy from the primary standards operated at other national measurement institutes around the world.

## Notes

No potential conflict of interest was reported by the authors.

## Additional Information

### Funding

This work

Industrial

European

European

OC18

Particip

innovati

within E

### Relate



Information for

- Authors
- R&D professionals
- Editors
- Librarians
- Societies

Opportunities

- Reprints and e-prints
- Advertising solutions
- Accelerated publication
- Corporate access solutions

Keep up to date

Register to receive personalised research and resources by email

 Sign me up

- 
- 
- 
- 
- 

Open access

- Overview
- Open journals
- Open Select
- Dove Medical Press
- F1000Research

Help and information

- Help and contact
- Newsroom
- All journals
- Books

Copyright

Accessib

Registered  
5 Howick Pl

or & Francis Group  
orma business

