

Jason Cole

London, UK
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- About** I am a physicist working in the field of compact laser-driven particle accelerators, interested particularly in their use as high-brightness secondary radiation sources. I am occasionally available for freelance work in data analysis and 3D visualisation and animation - please get in touch at the above address with enquiries.
- Employment** **Research Associate - Imperial College London** May 2015 - May 2017
- Planning and performing experiments on national-scale high power laser facilities in the UK, Europe, and the US.
 - Analysing data with a variety of techniques - Bayesian inference, integral transforms, iterative reconstruction techniques, inverse problem methods.
- Education** **PhD in Plasma Physics** Oct 2011 - May 2016
Diagnosis and Application of Laser Wakefield Accelerators
Imperial College London
- MA (Cantab) & MSci in Natural Sciences** Oct 2007 - June 2011
University of Cambridge, Churchill College. First class in Parts I, II and III.
- Awards**
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| 2017 | Culham Thesis Prize - top UK plasma physics PhD thesis, award of £500 |
| 2014 | Data Science Institute Summer Challenge - first prize, award of £3,500 |
| 2013 | Imperial College Physics Symposium Prize, award of £200 |
| 2010 | Churchill College Bullard Prize, award of £100 |
| 2007-11 | Churchill College Scholar's Prize, award of £125 |
- Computing**
- | | |
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| Languages | Matlab, Python, C++, Bash/Unix, Java |
| Courses | Coursera - Algorithms: Design and Analysis - 84.5% |
| GUI applications | Android, Matlab |
| Content creation | Latex, Blender |
- Selected publications**
- Laser-wakefield accelerators as hard x-ray sources for 3D medical imaging of human bone**
Scientific Reports June 2015
J. M. Cole, J. C. Wood, N. C. Lopes, K. Poder, R. L. Abel, S. Alatabi *et al.*
- Generation of a neutral, high-density electron-positron plasma in the laboratory**
Nature Communications February 2015
G. Sarri, K. Poder, J.M. Cole, W. Schumaker, A. Di Piazza, B. Reville, D. Doria *et al.*
- Outreach**
- Personal blog www.jasmcole.com, over 1 million page views, regularly featured on technology-focussed aggregators such as *Hacker News*.
 - Article for *The Conversation* featured in the *Guardian* and *New Scientist*.
 - Android application *WiFi Solver* based on numerical methods with over 25,000 paid downloads and £10,000 in revenue. Featured on *Ars Technica*, *Engadget* and national press.