Lucas Clemente

10/2011 - present

PhD Student

Max-Planck-Institute of Quantum Optics & LMU Munich

In the Quantum Information Theory group of Prof. Ignacio Cirac, I copioneered the field of Quantum Magnetomechanics. We proposed experimental setups using the magnetic properties of superconductors to observe quantum behavior on massive objects. Currently I am working on quantum foundations and macrorealism.

10/2009 - 10/2011

Student Research Assistant

Max-Planck-Institute of Quantum Optics

10/2009 - 10/2010

B.Sc. in physics

2....0

07/2008 - 10/2009 Student Research Assistant

Forschungszentrum Dresden-Rossendorf — Plasma Theory

06/2008 - 09/2009

Student Research Assistant

Cluster of Excellence "Munich Advanced Photonics"

10/2007 - 10/2009

Early studies in computer science & physics

TUM / LMU Munich

06/2007 - 05/2008

Student Research Assistant

 $\label{eq:main_main} \mbox{Maier-Leibnitz-Laboratorium Munich} - \mbox{Simulated Medical Physics}$

09/1999 - 06/2009

Abitur

Elementary School & Maria-Theresia-Gymnasium

During school I skipped the 1st, 8th and 10th grade, studied computer science and physics and worked as student research assistant at three different institutes. For my final thesis I received the thesis prize of the German Physical Society.

Contact

- contact@clemente.io (PGP 0x0E47693A)
- f luke.clemente
- **y** @luke_r2d2
- O lucas-clemente

Personal

Birthday

14/01/1993, Munich, Germany

Organizations

German National Academic Foundation ("Studienstiftung"), Chaos Computer Club, German Physical Society

Publications

- L. Clemente, J. Kofler: Retiring the Leggett-Garg inequality, arxiv:1509.00348
- L. Clemente, J. Kofler: Necessary and sufficient conditions for macroscopic realism from quantum mechanics, arxiv:1501.07517, PRA 91, 062103 (2015)
- L. Clemente, K. Kofler: Poster at Qupon 2015, Vienna, Austria
- L. Clemente, et al.: Poster at 554. WE-Heraeus-Seminar "Quantum Contextuality, Non-Locality and the Foundations of Quantum Mechanics" 2014, Bad Honnef, Germany
- L. Clemente, *et al.*: Poster at GRC "Mechanical Systems in the Quantum Regime" 2012,
 Galveston, TX, USA
- O. Romero-Isart, L. Clemente, C. Navau, A. Sanchez, J. I. Cirac: Quantum
 Magnetomechanics with Levitating
 Superconducting Microspheres,
 arXiv:1112.5609, PRL 109, 147205 (2012)
- F. Pastawski, L. Clemente, I. Cirac: Quantum memories based on engineered dissipation, arXiv:1010.2901, PRA 83, 012304 (2011)
- C. Hoeschen, H. Schlattl, M. Zankl, T.
 Seggebrock, L. Clemente, F. Grüner:
 Simulating mammographic absorption
 imaging and its radiation protection
 properties, World Congress 2009 Medical
 Physics and biomedical engineering
- L. Clemente: Integrating Tracking and Beam-Matter Interaction for Beam Line Design, Dresden FNI ITF 09