

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 co-pioneered 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

LMU Munich

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

Maier-Leibnitz-Laboratorium Munich — 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)
☎ +49 179 958 8901
f [luke.clemente](#)
t [@luke_r2d2](#)
🌐 [lucas-clemente](#)

Personal

Birthday

14/01/1993, Munich, Germany

Interests

Technology, Mathematical Physics,
Quantum Information, Economics, Music
(Piano), Jogging

Organizations

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

Publications

- 📄 L. Clemente, J. Kofler: Necessary and sufficient conditions for macroscopic realism from quantum mechanics, [arxiv:1501.07517](#)
- 🖼️ 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 ENLITE 09