

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 work on quantum foundations, in particular conditions for quantum violations of classical behavior in macroscopic systems. Before, I worked on field of quantum magnetomechanics, where we proposed experimental setups using the magnetic properties of superconductors to observe quantum behavior on massive objects.
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)
f [luke.clemente](#)
t [@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, *No Fine theorem for macrorealism: 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](#), *Phys. Rev. A* **91**, 062103 (2015)
- 📷 L. Clemente, J. Kofler, *Poster at Qupon 2015, Vienna, Austria*
- 📷 L. Clemente, J. Kofler, *Poster at 554. WE-Heraeus-Seminar "Quantum Contextuality, Non-Locality and the Foundations of Quantum Mechanics" 2014, Bad Honnef, Germany*
- 📄 W. Assmann, R. Becker, H. Otto, M. Bader, L. Clemente, S. Reinhardt, C. Schäfer, J. Schirra, S. Uschold, A. Weizmüller, R. Sroka, *³²P-haltige Folien als Implantate für die LDR-Brachytherapie gutartiger Stenosen in der Urologie und Gastroenterologie*, *Zeit. Med. Phys.* **23**, 21 (2013)
- 📷 L. Clemente, C. Navau, A. Sanchez, J. I. Cirac, O. Romero-Isart, *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](#), *Phys. Rev. Lett.* **109**, 147205 (2012)
- 📄 F. Pastawski, L. Clemente, I. Cirac, *Quantum memories based on engineered dissipation*, [arXiv:1010.2901](#), *Phys. Rev. A* **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 on Medical Physics and Biomedical Engineering*, 2009, Munich, Germany
- 👤 L. Clemente, *Integrating Tracking and Beam-Matter Interaction for Beam Line Design*, Talk at ENLITE 09, Dresden, Germany