Dr. Lucas Clemente

View at clemente.io

Contact

- contact@clemente.io
- PGP 0x0E47693A
- luke.clemente
- @luke_r2d2
- lucas-clemente
- lucas-clemente

Personal

- 14/01/1993, Munich, Germany
- Coffee, Mate
- Space-nerd
- 3d-printing (1, 2, 3)
- Chaos Computer Club
- Running, Scuba diving
- Mostly electronic

Publications

- L. Clemente, J. Kofler, No Fine Theorem for Macrorealism: Limitations of the Leggett-Garg Inequality, arXiv:1509.00348, Phys. Rev. Lett. 116, 150401 (2016)
- 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, ^{32}P-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

Side projects

Go Ember.js

quic-go

A Go implementation of the novel QUIC protocol (a proposed replacement for TCP+TLS and parts of HTTP/2). quic-go powers QUIC support in the Caddy server. A demo page is available at quic.clemente.io.

git-cr

Client-side encryption for git that also keeps your repo's metadata secure.

goldfish

A personal wiki / notes blend powered by markdown and git.

api2go

A JSONAPI Implementation for Go.

since 12/2016

Software Engineer

Google Zurich

10/2011 – 02/2016

PhD Student (thesis)

Mathematica Python

Theory group, Max-Planck-Institute of Quantum Optics

In the quantum information theory group of Prof. Ignacio Cirac, I worked on quantum foundations, in particular conditions for quantum behavior in macroscopic systems. Some of our results were covered by phys.org. Earlier, I worked in the field of quantum magnetomechanics, where we proposed experimental setups using superconductors to observe quantum behavior of massive objects. I obtained my PhD from LMU Munich in January 2016 with high honors.

During my time at MPQ I gave several seminars, the slides can be found here:

- Seminar on Macrorealism (Source)
- Seminar on inflation (Source)
- Seminar on macroscopicity measures (Source)

08/2012 – 11/2016

Co-founder

C++11 Rails Go Ember.js

univedo GmbH

I co-founded univedo, where we develop a novel solution for managing business data. Univedo uses a community-driven schema to integrate data between different apps and enables the simplification of complex business processes. Our platform is the basis for the industrial automation system evomecs.

06/2007 – 10/2011

Various Student Research Assistantships

C++ Mathemtica

Theory group, Max-Planck-Institute of Quantum Optics

Computational radiation physics, Helmholtz Zentrum Dresden Rossendorf

FEL group, Cluster of Excellence "Munich Advanced Photonics"

Medical physics, Maier-Leibnitz-Laboratorium Munich

10/2009 – 10/2010

B. Sc. in physics (thesis)

LMU Munich

After early studies in computer science (at TUM) and physics (at LMU Munich), I completed my bachelor's degree at LMU.

09/1999 – 06/2009

Abitur (thesis)

C++

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.