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Lucas Clemente

10/2011 – present

PhD Student (thesis)

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 in the 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 (thesis)

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.

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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

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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)

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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)

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C. Hoeschen, H. Schlattl, M. Zankl, T. Seggebrock, L. Clemente, F. Gru¨ner, 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, Germant