Curriculum Vitæ

1. Personal data

András Vukics, born: 2nd May 1979, citizenship: Hungarian

2. Education

- 1997–2003: Roland Eötvös University, Budapest
  - physicist (M. Sc.), specialization: statistical physics, degree "honors"
- 2000–2003: École Normale Supérieure de Paris, Université Pierre et Marie Curie (Paris 6)
  - Maîtrise de physique
- 2003–2006: PhD student at the Research Institute for Solid State Physics and Optics of the Hungarian Academy of Sciences, Budapest.
  - Post-gradual studies at the University of Szeged.
  - PhD thesis at the University of Szeged: *Mobile atoms in a cavity field: statistical and quantum aspects* — adviser: Peter Domokos

3. Research interest

- The philosophy (particularly, the epistemology) of science, the definition and limits of scientific knowledge
- Quantum optics, cavity QED, optomechanics, cold atoms
- Fundamental aspects of quantum mechanics, quantum information, quantum computing
- Statistical physics, phase transitions, scaling — applications in interdisciplinary areas — maximum entropy and Bayesian methods.
- Applications of high-level programming for expressing physical concepts

4. Research experience

- 1998–1999: Vibrated granular layers as models for molecular motors. Adviser: Tamás Vicsek, Dept. of Biol. Phys., Eötvös University, Budapest
- 1999–2003: Sympatrical evolutionary branching. Adviser: Géza Meszéna, "
- 2001: Bi-phase flows in microfluidics. Adviser: Hervé Willaime, Laboratoire de Phys. Stat., ENS, Paris
- 2001–2002: Lossy quantum communication in coherent-state basis. Adviser: József Janszky, Research Institute for Solid State Physics and Optics, Budapest

- 2002–2006: Mobile atoms in optical cavities. Adviser: Peter Domokos, “
- 2006–2010: Postdoc. fellow in the group of Helmut Ritsch, Institute for Theoretical Physics, University of Innsbruck — Quantum many-body effects in optical cavities
- 2006– Development and maintenance of C++QED: an object-oriented framework for simulating open interacting quantum dynamics — `http://cppqed.sf.net/`
- 2010–: Postdoc. fellow in the group of Peter Domokos at the Department of Quantum Optics and Quantum Information, Research Institute for Solid State Physics and Optics of the Hungarian Academy of Sciences

5. Teaching experience

- Winter semester 2012/2013: *Quantum simulations in C++*. PhD course at the University of Innsbruck

6. Awards

- 2004: “Pro Scientia” award from the Hungarian Council of Students in Research
- 2012–: János Bolyai Research Scholarship of the Hungarian Academy of Sciences

7. Publications

- papers in journals: 20
- citations (according to ISI): 192
- h-index: 9

8. Languages

Living Native Hungarian, full working knowledge in English, fluent French, basic German

Ancient Sanskrit, Classical Arab, Middle High German