Karl Svozil

Curriculum Vitæ

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Personal data

18. 12. 1956	**born in Vienna, Austria**, Austrian (EU) nationality.
	two children, (Anna, 19, Alexander, 23).
	Roman Catholic.

Education

1975–1981	**PhD**, *University of Vienna and Heidelberg*, Vienna and Heidelberg, *PhD*.
1982–1983	**Visiting Scholar**, *University of California at Berkeley and at the Lawrence Berkeley Laboratory*, Berkeley, through The Rotary Foundation of Rotary International.
12. 3. 1988	**Dozentur**, *Vienna University of Technology*, Vienna, *Universitätsdozent.*

Experience

Vocational

1984–1990	**Staff scientist**, *Austrian Ministry for Science & Research*, Vienna.
1990–1997	**Permanent researcher**, *Vienna University of Technology*, Vienna.
1997–present	**A.o. Universitätsprofessor**, *Institute for Theoretical Physics of the Vienna University of Technology*, Vienna.

Academic and organizational

1984–present	**Scientific visits**, *Various prolonged visits in academic institutions; among them research centers in the USA, Canada, New Zealand, Germany, Russia, Italy, Denmark, Malaysia and India.*
1994–present	**Editoral duties**, *Associated Editor of journals in Physics and Computer Science.*
2003–present	**(Co-)organizer**, *Organizer and co-organizer of various scientific conferences in Physics and Computer Science.*
2010–present	**Panel Member**, *Fonds Wetenschappelijk Onderzoek - Vlaanderen, Bergium.*
2011–present	**Honorary Appointment**, *Centre for Discrete Mathematics and Theoretical Computer Science, of The University of Auckland in New Zealand.*
2011–present	**PhD school**, *Coorganizer of a PhD program in Physics and Computer Science at the Vienna University of Technology.*
2012–2014	**President**, *International Quantum Structure Association (since 2014 Vice President).*

Publications

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Books

Karl Svozil. *Randomness & Undecidability in Physics*. World Scientific, Singapore, 1993.

Karl Svozil. *Quantum Logic*. Springer, Singapore, 1998.

Selected Articles

Alastair A. Abbott, Cristian S. Calude, Jonathan Conder, and Karl Svozil. Strong Kochen-Specker theorem and incomputability of quantum randomness. *Physical Review A*, 86: 062109, Dec 2012. doi: 10.1103/PhysRevA.86.062109. URL http://dx.doi.org/10.1103/PhysRevA.86.062109.

Daniel M. Greenberger and Karl Svozil. Quantum theory looks at time travel. In S. Dolev A. Elitzur and N. Kolenda, editors, *Quo Vadis Quantum Mechanics?*, pages 63–72, Berlin, 2005. Springer.

Volkmar Putz and Karl Svozil. Quantum music. *Soft Computing*, pages 1–5, 2015. ISSN 1432-7643. doi: 10.1007/s00500-015-1835-x. URL http://dx.doi.org/10.1007/s00500-015-1835-x.

Karl Svozil. Dimensional reduction via dimensional shadowing. *Journal of Physics A: Mathematical and General*, A19(18):L1125–L1127, 1986. doi: 10.1088/0305-4470/19/18/002. URL http://dx.doi.org/10.1088/0305-4470/19/18/002.

Karl Svozil. The quantum coin toss—testing microphysical undecidability. *Physics Letters A*, 143:433–437, 1990. doi: 10.1016/0375-9601(90)90408-G. URL http://dx.doi.org/10.1016/0375-9601(90)90408-G.

Karl Svozil. Computational universes. *Chaos, Solitons & Fractals*, 25(4):845–859, 2006a. doi: 10.1016/j.chaos.2004.11.055. URL http://dx.doi.org/10.1016/j.chaos.2004.11.055.

Karl Svozil. Staging quantum cryptography with chocolate balls. *American Journal of Physics*, 74(9):800–803, 2006b. doi: 10.1119/1.2205879. URL http://dx.doi.org/10.1119/1.2205879.

Karl Svozil. Physical unknowables. In Matthias Baaz, Christos H. Papadimitriou, Hilary W. Putnam, and Dana S. Scott, editors, *Kurt Gödel and the Foundations of Mathematics*, pages 213–251. Cambridge University Press, Cambridge, UK, 2011. URL http://arxiv.org/abs/physics/0701163.

Karl Svozil and Anton Zeilinger. Is there a breakdown of QED in $(g-2)$-measurements? *Physica Scripta*, T21:122, 1988.

Anton Zeilinger and Karl Svozil. Measuring the dimension of space-time. *Physical Review Letters*, 54:2553–2555, June 1985. doi: 10.1103/PhysRevLett.54.2553. URL http://dx.doi.org/10.1103/PhysRevLett.54.2553.