

Curriculum Vitae Of Johannes (Jan) Zaanen.

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Born: 1957, Leiden, the Netherlands

Professional Career:

- 1982 Graduated in Chemistry from University of Groningen, Cum Laude.
- 1986 Doctorate in Physics from the University of Groningen, Cum Laude,
Thesis advisor G.A. Sawatzky.
- 1987 Post-doctoral research associate (Max-Planck Stipendiat) at the
Max-Planck Institut für Festkörperforschung, Stuttgart, Germany.
- 1988 Member of the scientific staff at the Max-Planck Institut
für Festkörperforschung, Stuttgart, Germany.
- 1990 Resident visitor of the theory department of AT&T Bell Laboratories
(Murray Hill, New Jersey, USA), supported by the dutch Foundation
for Fundamental Research.
- 1993 Fellowship (5 years) of the KNAW (Dutch Academy of Sciences),
at the Instituut-Lorentz for Theoretical Physics of Leiden University, The Netherlands.
- 1998 Universitair Hoofd Docent (Associate Professor) of Theoretical Physics,
Leiden University, The Netherlands.
- 2000 (- present) Professor of Theoretical Physics, Leiden University, the Netherlands.
- 2004 - 2005 Visiting Professor of Theoretical Physics (on Stanford payroll),
Stanford University, USA.

Distinctions:

- 1986 Koninklijke Shell Studiebeurzen Prijs for the best doctoral thesis in the sciences at the University of Groningen in 1986.
- 2001 Portrait in IOTA (TELEAC, dutch television)
- 2004 Senior Fellowship of the Fulbright foundation, USA.
- 2004 Winner of the Dutch National Science Quiz.
- 2005 Guestwriter of *Nature* (Journal Club column).
- 2006 Spinoza Award of the NWO.
- 2008 Outstanding referee award of the American Physical Society.
- 2008 Fellow of the American Physical Society.

Professional activities:

- 1985 Consultant of Xerox Palo Alto Research Laboratory, USA.
- 1988 Consultant of Philips Research Laboratory, The Netherlands.
- 1990-1993 Visiting scholarship of AT&T Bell Laboratories, Murray Hill, USA)
- 1996-1999 Consultant of Los Alamos National Laboratory, USA.
- 2001- Chairman of the Ehrenfest Colloquium (general Physics Colloquium at Leiden University).
- 2005- Board of the DRSTP (Dutch Research School for Theoretical Physics).
- 2007- Member, Advisory board Capital Tool Company
- 2007- Member, Review Editorial Board, Science Magazine.
- 2008- Director, Casimir (Leiden-Delft) Graduate School.

Ph.D Students

- 1999 C.N.A. van Duin: *On Quantum Magnetism in Cuprate Superconductors.*
- 2000 O.Y. Osman: *On Stripe Correlations in Cuprate Superconductors.*
- 2003 H.V. Kruis: *On Hidden Order in Luttinger Liquids.*
- 2004 B. Hosseinkhani: *On the Thermodynamics at Quantum Phase Transitions in Two Dimensional Electron Systems.*
- 2006 V. Cvetkovic: *Quantum Liquid Crystals.*
- 2007 J. van Wezel: *Quantum Mechanics and the Big World.*
- 2007 B.W.A. Leurs: *Non Abelian Gauge Theories: Analogies in Condensed Matter Systems.*

Conference Organization 2001-2008:

- 2001 (- present) Coordinator of two-yearly National Seminarium on Condensed Matter Physics, the Netherlands
- 2001 co-organizer VII Dutch-Polish Colloquium on Condensed Matter Physics, Lorentz Center, Leiden, The Netherlands.
- 2001 organizer International Workshop on Strongly Correlated Electron Systems, Lorentz Center, Leiden, The Netherlands.
- 2002 co-organizer symposium Theory of Superconductivity, 19-th general conference of the EPS Condensed Matter Division, Brighton, United Kingdom.
- 2002 Program committee and organization, the International Conference Frontiers in condensed matter physics: electronic structure and properties FESP02, Groningen, The Netherlands.
- 2003 International Advisory Board, International conference on hidden symmetries in strongly correlated electron systems, Kings College, London, England.
- 2003 Program committee FOM Veldhoven meeting, Veldhoven, The Netherlands.
- 2004 International Advisory Board, NATO-ARW on New Challenges in Superconductivity, Miami, USA.
- 2004 International Advisory Board, Seventeenth international conference on spectroscopies in novel superconductors, Sitges, Spain.
- 2004 Co-organizer, International Workshop on Emerging Issues in heavy fermion materials physics, Lorentz Center, Leiden, The Netherlands.
- 2005 International Advisory Board, International Workshop on Electronic crystals (ECRYS 2005), Cargese, France.
- 2005 Co-organizer, International Workshop on Complex Behavior in electron systems, Lorentz Center, Leiden, The Netherlands.
- 2006 Program Committee 'Stripes 2006', Rome, Italy.
- 2007 Chairman Program Committee, Meeting of the Dutch Research School of Theoretical Physics 'Dalfsen 2007', Dalfsen, the Netherlands.
- 2007 Program Committee FOM meeting 'physics@veldhoven 2007', Veldhoven, the Netherlands.
- 2007 Coorganizer Lorentz-Center Workshop 'Gravity meets Condensed Matter', Leiden, The Netherlands.
- 2008 Director, program Committee, International Conference on Low Temperature Physics LT25, 2008, Amsterdam, The Netherlands.
- 2008 Scientific advisory board international conference "Stripes08", Cargese, Italy.
- 2008 International Advisory Board, International Workshop on Electronic crystals (ECRYS 2008), Cargese, France.
- 2008 Program director CMT32 International workshop on condensed matter theories, Loughboro, UK.

Invitations for oral presentations at international meetings (2006-2007):

1. J. Zaanen, *Observing the Orderly Limit of Superconductivity*, CREST International Workshop "Highlights and perspectives in Strongly Correlated Electronic Systems", Tokyo, Japan, Januari 2006.
2. J. Zaanen, *Where are the spin superfluids?*, COE workshop "Advances in Strongly Correlated Electronics", Kashiwa, Japan, Januari 2006.
3. J. Zaanen, *Duality and elastic matter*, KITP program on Topological Phases and Quantum Computation, Santa Barbara, USA, Februari 2006.
4. J. Zaanen, *20 years of high T_c superconductivity*, National Seminarium Condensed Matter, Utrecht, The Netherlands, April 2006.
5. J. Zaanen, *Proving the fluctuating stripes in the high T_c superconductors*, International conference M2S-HTSC VIII, Dresden, Germany, July 2006.
6. J. Zaanen, *Fermionic Quantum Criticality and the Fractal Nodal Surface*, Theoretical and experimental Magnetism Meeting, Abingdon, UK, August 2006.
7. J. Zaanen, *Fermionic Quantum Criticality and the Fractal Nodal Surface*, Lorentz Center workshop 'Quantum Criticality', Leiden, The Netherlands, August 2006.
8. J. Zaanen, *Fermionic Quantum Criticality and the Fractal Nodal Surface*, International workshop 'Orbital 2006', Berlin, Germany, October 2006.
9. J. Zaanen, *Proving the fluctuating stripes in the high T_c superconductors*, International Conference 'Phase separation in electronic systems', Crete, Greece, November 2006.
10. J. Zaanen, *Proving the fluctuating stripes in the high T_c superconductors*, International Conference 'Stripes 2006', Rome, Italy, December 2006.
11. J. Zaanen, *Observing fluctuating stripes in high T_c superconductors*, New3SC international conference, Sydney, Australia, Januari 2007.
12. J. Zaanen, *Fermionic quantum criticality*, CREST workshop on charge dynamics in High T_c superconductors, Tokyo, Japan, Februari 2007.
13. J. Zaanen, *Fermionic quantum criticality and the fractal nodal surface*, Exploring Quantum Matter: Visions and Opportunities Conference, St.Andrews, UK, July 2007.
14. J. Zaanen, *Fermionic quantum criticality and the fractal nodal surface*, Theoretical and Experimental Magnetism Meeting, Abingdon, UK, July 2007.
15. J. Zaanen, *Fermionic quantum criticality and the fractal nodal surface*, Lorentz Center workshop Condensed Matter meets Gravity, Leiden, August 2007.

16. J. Zaanen, *Fermionic quantum criticality*, XVII symposium on condensed matter, Vrsac, Serbia, September 2007.
17. J. Zaanen, *Fermionic quantum criticality*, Magnetic and Superconducting Materials Conference 07, Khiva, Uzbekistan, September 2007.
18. J. Zaanen, *Member of the theorists panel*, BCS at 50 International Conference, Urbana, USA, October 2007.
19. J. Zaanen, *The high Tc Enigma: it is the normal state, stupid!*, Tsukuba, Japan, Keynote Lecture, International Symposium on lattice effects in Cuprate High Tc superconductors, Tsukuba, Japan, November 2007.
20. J. Zaanen, *Fermionic quantum criticality*, Forum of Physics 2007: frontiers in condensed matter physics, Hong Kong, China, December 2007.