

CURRICULUM VITÆ OF MATS JONSON

Personal details

Born 1947 in Halmstad, Sweden; Swedish citizen, married
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Professional training

Civilingenjör F (MSc in Engineering Physics), Chalmers University of Technology, 1971
 Teknisk doktorsexamen (PhD) in Theoretical Physics, Chalmers Univ of Technology, 1978
 Postdoc (with Prof. G.D. Mahan), Indiana University, Dept of Physics, 8/1978 – 7/1980
 Docent (habilitation) in Theoretical Physics, Chalmers University of Technology, 1984

Appointments

2014 – present Senior Professor of Physics at the University of Gothenburg
 2014 – 2017 Honorary Professor of Physics at Heriot-Watt University, Edinburgh
 2007 – 2014 Professor of Physics (half time pos.) at Heriot-Watt University, Edinburgh
 2009 – 2013 Guest Professor (Foreign Professor) at Konkuk University, Seoul
 2005 – 2014 Professor of Condensed Matter Physics at the University of Gothenburg
 1993 – 2004 Professor of Condensed Matter Physics (chair) at Chalmers Univ. of Techn.
 2000 – 2003 Dean, School of Physics and Engin. Physics, Chalmers/Univ. of Gothenburg
 1992 – 1993 Associate Professor (högskolelektor) of Theoretical Physics, Chalmers
 1992 – 1997 Chair of the Dept of Applied Physics, Chalmers/Univ. of Gothenburg
 1989 – 1990 Guest Scientist, Solid State Division, Oak Ridge Nat. Lab., Oak Ridge, TN
 1986 – 1992 Assoc. Professor (högskolelektor) of Theoretical Physics, Univ. of Gothenburg
 1984 – 1986 Docent in Theoretical Physics, University of Gothenburg
 1980 – 1984 Research Assistant (forskarassistent), Chalmers University of Technology

Tutorial experience

Theses of graduate students examined

M. E. Peña-Aza (2013), *Electromech phenomena in superconducting & normal nanostructures*
 A. Nordenfelt (2012), *Self oscillations and cooling of carbon based NEMS devices*
 F. Santandrea, (2011), *Electronic control of flexural nanowire vibrations*
 G. Sonne (2011), *Mesoscopic phenomena in the electromechanics of suspended nanowires*
 L. M. Jonsson (2007), *Carbon nanotube based nanoelectromechanics (May 2007)*
 D. Fedorets (2004), *Quantum theory of nanoelectromechanical shuttling*
 K. Engström (2003), *Interactions and interference in mesoscopic Systems: Josephson current through quantum dots and Josephson junction arrays*
 T. Nord (2003), *Electromechanical interactions in shuttle systems and carbon nanotube relays*
 T. Ambjörnson (2003), *Electromagnetic response of living matter*
 A. Isaksson (2002), *Shuttle transport of charge in normal and superconducting nanostructures*
 S. Blom (2001), *Mechanical and electrical properties of mesoscopic wires*
 N. Lundin (2000), *Adiabatic Andreev levels under irradiation-coherent dynamics and dephasing*
 O. Tøgemann (1998), *Coherent far-infrared mode pumping in ballistic electron channels*
 P. Sandström (1998), *Correlation effects in one-dimensional electron systems*
 H. Blom (1997), *Nature of conduction in normal mesoscopic samples contacting (Lic. thesis)*
 P. Hessling (1996), *Fluctuations in mesoscopic constrictions*

M. Gisselält (1996), *Parity effects in single-charge tunnelling*
 A. Grincwajg (1994), *Electron transport and optical properties in mesoscopic systems*
 T. Swahn (1993), *Magnetotransport and persistent currents in ballistic microstructures*
 B. Rudberg (1991), *Electron tunneling in semicond. structures - scattering and polarization effects*

Postdoctoral associates

H.-C. Park, 2010-2011, Research Associate, KIST Seoul, Korea
 D. Radic, 2008-2010, Research Associate, Chalmers University of Technology, Gothenburg
 O. Usmani, 2007, CO2 strategy analyst at Shell in Den Haag, the Netherlands.
 R. Ferone, 2006-2008, Research Associate, University of Lancaster, UK
 S. Viefers, 2001-03, Professor, Oslo University
 C. Canali, 1996-97, Professor, University of Kalmar.
 A. Zagoskin, 1994-95, Adj. Professor, University of British Columbia, Vancouver.
 D. Lubin, 1992-93, present situation unknown

Honors and Scientific Societies

Member of the Swedish Royal Academy of Sciences since 1996
 Member of the Royal Society of Arts and Sciences in Gothenburg since 2007
 Foreign member of the Korean Academy of Science and Technology since 2011
 Foreign member of the Finnish Academy of Science and Letters since 2013
 Member of the Board of Trustees of the Nobel Foundation, 2006-2009
 Member of the Nobel Committee for Physics 1996-2005 and 2013
 Chair of the Nobel Committee for Physics 2001-2003
 Member of the Symposium Committee of the Nobel Foundation, 2001-2003
 Deputy Chair of the Physics Class of the Royal Academy of Sciences, 1998 - 2000
 Member of the Board of the Swedish Physical Society, 1995 – 2000.
 Treasurer of the Swedish Physical Society, 1995 - 97; Deputy Chair, 1998 - 1999
 Member of the Swedish National Committee for Physics, 1995 - 2000
 Member of the American Physical Society, 1989-
 Member of the Swedish Physical Society, 1989-
 Member of the European Physical Society, 1995-

Scientific Fields of Interest

Theory of electron correlation effects in low dimensional- and inhomogeneous systems.
 Electron transport in low dimensional systems. Coulomb blockade and single electron tunneling. Mesoscopic superconductivity. Nanoelectromechanics.

Publications, Invited Talks, Conference Organization

More than 190 scientific articles
 More than 60 invited talks at international conferences
 Organizer or co-organizer of 20 international conferences

Scientific Advisory Boards (current)

Member of the Advisory Board, NTT Basic Research Laboratories, Atsugi, Japan, 2005-
 Associate Editor of Nano Convergence (a SpringerOpen Journal), 2013-