CURRICULUM VITÆ OF MATS JONSON

Personal details

Born 1947 in Halmstad, Sweden; Swedish citizen, married Address: Dept of Physics, University of Gothenburg, SE-412 96 Göteborg, Sweden Tel.: +46 70 308 8070; +44 7411 096 913 E-mail: mats.jonson@physics.gu.se

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

2018 – present	Emeritus Professor of Physics at the University of Gothenburg
2014 - 2018	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 Prof.) at Konkuk University, Seoul, Rep. of Korea
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 intereference 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. Tageman (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. Gisselfält (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 - 97; Deputy Chair, 1998 - 1999
Member of the Swedish National Committee for Physics, 1995 - 2000
Member of the Swedish Physical Society, 1989-

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, Spintronics.

Publications, Invited Talks, Conference Organization

More than 200 scientific articles More than 60 invited talks at international conferences Organizer or co-organizer of 20 international conferences