

1. *The role of nonlinear dynamics in quantitative atomic force microscopy.* Upsalla University, May 2012 (Seminar and Visit).
2. *The role of nonlinear dynamics in quantitative atomic force microscopy.* Workshop on Advanced SPM techniques, Karlsruhe, March 2012. (Contributed Talk).
3. *Intermodulation Atomic Force Microscopy.* ABB Vesterås Sweden, Feb. 2012 (Seminar and visit)
4. *Intermodulation Spectroscopy: A Novel Frequency Domain Approach to Atomic Force Microscopy.* Material Reserach Society Fall Meeting, Nov. 28 - Dec. 2, 2011, Boston (Invited Talk).
5. *Coulomb Blockade of Cooper pair Tunneling in Josephson Junction Arrays,* Summer School on Quantum coherence in Nanostructures, Sept. 11-14, 2011, Bad Herrenalb, Germany. (Invited Talk)
6. *Lectures on Single Charge Tunneling,* European Summer School on Nanotechnology (ESSON), Grenoble France, Aug. 2011. (Invited Lectures).
7. *Using Frequency Combs to Determine Atomic Forces,* Q-Nano - Japanese-Swedish Conference Series, June 13-14 2011, Visby (Invited Talk).
8. *Nanoscale Surface Force Measurement Using Nonlinear Dynamics.* University of Massachusetts, Amherst, April 1, 2011 (Seminar and Visit).
9. *Nanoscale Surface Property Measurement with Nonlinear Dynamics.* Rensselaer Polytechnic Institute, Troy NY, March 30, 2011 (Seminar and Visit).
10. *Intermodulation Spectral Analysis and the Intermodulation Lockin,* IBM T.J. Watson Research Facility, Yorktown Heights NY, March 28, 2011 (Seminar and Visit).
11. *Intermodulation Spectral Analysis and the Intermodulation Lockin,* APS March Meeting, 2011, Dallas Texas (Contributed Talk).
12. *Measuring Tip-Surface Interaction with Frequency Mixing and Nonlinear Dynamics,* 3rd International Conference on Multifrequency AFM, March 14-16, 2011, Madrid, Spain. (Invited Talk)
13. *Harmony and Dissonance to Decode the Nanoworld,* Swedish Royal Academy of Sciences, March 2, 2011. (Invited Talk)
14. *Measuring Atomic Forces with Nonlinear Dynamics,* Seminar and visit with Prof. Lazlo Faaro, EPFL Lausanne, Switzerland, Feb. 14, 2011 (Seminar and Visit).
15. *Measuring Atomic Forces with Nonlinear Dynamics,* Chalmers Linne Center Colloquium, Götegor Sweden, Jan. 27, 2011 (Invited Talk).
16. *Measuring Atomic Forces with Nonlinear Dynamics,* Seminar and visit with Dr. Hans Hugg, EMPA Switzerland, Jan. 10, 2011 (Seminar and Visit).
17. *Measuring Atomic Forces with Nonlinear Dynamics,* Seminar and visit with Prof. Ernst Meyers group, University of Basel, Switzerland, Jan. 11, 2011 (Seminar and Visit).
18. *Intermodulation in Microresonators,* Swiss-Swedish conference on Quantum Materials and Devices, Les Diableret Switzerland, Jan. 7-9, 2011 (Contributed Talk).
19. *Josephson Junction Arrays for Quantum Metrology,* Nordita *Conference on Quantum Matter in Low Dimensions: Opportunities and Challenges.* Sept. 6-10, 2010 (Invited Talk).
20. *Intermodulation Atomic Force Microscopy,* American Society of Mechanical Engineers, ASME 2010 Montreal, Canada, Aug 2010 (Contributed Talk).
21. *Lectures on Single Charge Tunneling,* European Summer School on Nanotechnology (ESSON), Grenoble France, Aug. 2010. (Invited Lectures).
22. *Multi Frequency Atomic Force Microscopy,* Swedish Surface Chemistry Institute (YKI) , May 2010 (Invited Lecture, Webinar).
23. *Enhancement of Resonant Sensors using Intermodulation – with application to Atomic Force Microscopy,* Microsystems Workshop MSW2010, May 2010. (Contributed Talk).
24. *Probing Interracial Forces at the Nanometer Scale with Atomic Force Microscopy.* KTH workshop on Interfaces, Section for Surface Chemistry, March 2010.(Contributed talk)
25. *Josephson Junction Arrays for Quantum Metrology,* Heraeus Seminar 445, Quantum Metrology with Solid State Devices, Physik Centrum Bad Honeff, Oct. 2009 (Invited Lecture).
26. *Intermodulation Atomic Force Microscopy,* Institute Neal Seminar, CNRS Grenoble, France, Aub. 2009 (Seminar and Visit).
27. *Lectures on Single Charge Tunneling,* European Summer School on Nanotechnology (ESSON), Grenoble France, Aug. 2009. (Invited Lectures).
28. *Intermodulation Atomic Force Microscopy,* James Frank Institute Seminar, University of Chicago, May 2009, (Seminar and Visit).
29. *The Series Josephson Junction Array: from collective modes to quantum phase transitions – with applications.* Workshop honoring Prof. Allan Goldman, May 2009 (Invited).

30. *Lectures on Single Charge Tunneling*, European Summer School on Nanotechnology (ESSON), Grenoble France, Aug. 2008. (Invited Lectures).
31. *Intermodulation Atomic Force Microscopy*, International Multi Frequency AFM conf. Madrid Spain, Sept. 2008 (Contributed Talk).
32. *The series Josephson Junction Array*, JILA – NIST joint seminar, Boulder Co, May 2008 (Invited).
33. *Intermodulation Atomic Force Microscopy*, Mt. Holyoke College, May 2008 (seminar and visit).
34. *Quantum Fluctuations in Josephson Junction Transmission Lines*, Harvard University, Condensed Matter Theory Seminar, March 2008 (seminar and visit).
35. *Resonant Detection and Nonlinear Dynamics with Microresonators*, Dartmouth College Condensed Matter Seminar, Feb. 2008, (seminar and visit).
36. *Resonant Detection and Nonlinear Dynamics with Microresonators*, Union College Physics Colloquium, Feb. 2008, (Invited).
37. *Nonlinearities and Parametric Amplification in Superconducting Coplanar Waveguide Resonators and AFM*, Yale, Optics Solid State Seminar, Dec. 2007 (Invited).
38. *One dimensional Josephson junction arrays and their Implications for Fundamental Metrology*, UMASS Condensed Matter Seminar, Nov. 2007 (Invited).
39. *Nonlinearities and Parametric Amplification in Superconducting Coplanar Waveguide Resonators*, Amherst College Colloquium, Sept. 2008 (Invited).
40. *Lectures on Single Charge Tunneling*, European Summer School on Nanotechnology (ESSON), Grenoble France, Aug. 2007. (Invited Lectures).
41. *Quantum Fluctuations and Electrodynamics of 1D Josephson Junction Arrays*, Workshop on Quantum Effects in Arrays of Nanocrystals (QEAN), Lorentz Center, April 23-27, 2007. (Invited Talk).
42. *One dimensional Josephson junction arrays and their Implications for Fundamental Metrology*, PTB, Braunschweig, April 20, 2007 (Invited Seminar).
43. *Nonlinearities and Parametric Amplification in Superconducting Coplanar Waveguides*, Workshop on Superconducting Microresonators, Caltech, March 19-20, 2007. (Contributed Talk).
44. *Quantum SQUID arrays as biasing elements*, WE Hereaus Seminar on: Qubits and Macroscopic Quantum Coherence: From Superconducting Devices to Ultra-cold Gases, Bad Honnef, May 7 - 11, 2006. (Invited Talk)
45. *Charge Phase duality in a fluctuating electromagnetic environment*, Condensed Matter Seminar, University of Maryland, Feb. 2006. (Seminar and visit).
46. *Charge Phase duality in a fluctuating electromagnetic environment*, Workshop on Non-equilibrium Phenomena in Strongly Correlated Quantum Systems at Harvard-Smithsonian ITAMP, Feb. 2006, (Invited Talk).
47. *Charge Phase duality in a fluctuating electromagnetic environment*, Symposium on Frontiers in Low Temperature Physics, in honor of Prof. Tord Claesson (Invited Talk).
48. *Biasing quantum circuits with Josephson Junction Arrays*, Kilpsjärvi Spring School, Kilpsjärvi, Finland, May 2005 (Invited Talk).
49. *Spin Transport and Superconducting Nano-circuits*, NEC basic research lab, April 2005, Tsukuba, Japan (seminar and visit).
50. *Spin and Charge currents in nano-scale ferromagnetic circuits*, Q-Nano Sweden Japan workshop, Kyoto Japan, April 2005 (Invited Talk)
51. *Spin Transport and Superconducting Nano-circuits*, NTT basic research lab, Atsugi, Japan, April 2005 (seminar and visit).
52. *Tunable Quantum Fluctuations with 1D SQUID Arrays*, 20th General Conference on Condensed Matter Physics, European Physical Society, Prague, July 2004 (Invited Talk)
53. *Detecting the Quantum State of an Electronic Circuit*, Iowa State University, Condensed Matter seminar, Ames, July 2004 (seminar and visit).
54. *Detecting the Quantum State of an Electronic Circuit*, University of Minnesota Condensed Matter seminar, Minneapolis, June 2004 (seminar and visit).
55. *Self Assembly for Nanotechnology*, Surface Chemistry YKI seminar, KTH, May 2004 (seminar and visit).
56. *Quantum Josephson junctions at KTH—work in progress*. NTT Basic Research Labs seminar, Atsugi, Japan, April 2004 (seminar during invited stay, 1 month)
57. *Quantum Josephson junctions at KTH—work in progress.*, NEC Labs seminar, Tskuba, Japan, April 2004 (seminar and visit)
58. *Self Assembly for Nanotechnology*, NanoTech Forum, Stockholmssäsan, Nov. 2003. (Invited Talk)

59. *Quantum Fluctuations Effects in 1D Josepson Junction Arrays*, Workshop on “Hot Topics in Quantum Statistical Physics: q-Thermodynamics, q-Decoherence and q-Motors” Aug 11-16 2003, Lorentz Center, Leiden (Invited Talk).
60. *Quantum Fluctuations Effects in 1D Josepson Junction Arrays*, Group Seminar, SUNY Stonybrook, June 3, 2003 (seminar and visit).
61. *Quantum Fluctuations Effects in 1D Josepson Junction Arrays*, Condensed Matter Seminar, Yale University, June 3, 2003 (seminar and visit).
62. *Quantum Fluctuations Effects in 1D Josepson Junction Arrays*, Condensed Matter Seminar, University of Massachusetts, Amherst, June 2, 2003
63. *Quantum Effects in Nano-Electronic Circuits*, Union College, Physics Department Colloquium, May 30, 2003 (seminar and visit).
64. *Josephson Junctions for quantum bits*. Japan-Sweden JST miniworkshop. May 16, 2003, Lund Sweden. (Invited Talk)
65. *Charge and Flux Solitons in Superconducting Circuits*. Seminar in Applied and Theoretical Mechanics, KTH Jan 14, 2003 (seminar and visit).
66. *Cooper Pair Tunneling and Coulomb Blockade*. International Conference on Nanoelectronics, Lancaster Univ. Jan. 1-9, 2003 (Invited Talk).
67. *Bloch Oscillations in small capacitance Superconducting tunnel junctions and Arrays*. SET Metrology Workshop, METAS, Bern, Switzerland, Nov. 20-21, 2002 (Invited Talk)
68. *Coulomb blockade for Cooper pairs in 1D Josephson junction arrays and its duality to the Josephson Effect*. NIST, Boulder Co. June 2002 (seminar and visit)
69. *Magnetic Switching and Magnetoresistance in Co/AlO/Co nano-scale Tunnel Junctions*, COST meeting, Brighton England, April, 2002 (Contributed talk)
70. *Minisymposium: Macroscopic Quantum Phenomena in Josephson Junctions*, CMMP 2002, EPS meeting in Brighton, April, 2002 (chaired and organized session).
71. *Josephson Junctions for Quantum Bits*. Reiken Research Laboratory, Japan, March 2002 (Seminar and visit).
72. *Tunable Electrodynamic Environment and Coulomb Blockade with 1D SQUID arrays*. MS+S2002, NTT Basic Research Labs, Atsugi Japan, March 2002 (Contributed talk).
73. *Josephson Junction Arrays as a tunable environment for Macroscopic Quantum Coherence Experiments*. Aspen winter conference on Quantum Coherence and Dissipation, Feb. 2002 (Invited talk).
74. *Magnetic Switching and Magneto resistance in Co/AlOx/Co nano-scale tunnel junction structures*. University of Minnesota, Feb. 2002 (Seminar and visit)
75. *Magneto resistnace in Co/AlOx/Co nano-scale tunnel junction structures*. CNRS Grenoble, Jan. 2002 (Seminar and visit)
76. *Josephson Junction Arrays as a tunable environment for Macroscopic Quantum Coherence Experiments*, Nobel Jubilee Symposium "Condensation and Coherence in Condensed Systems", Göteborg, Dec. 2001 (Invited Talk).
77. *Josephson Junctions for Quantum Bits*. SCFAB, Stockholm (Department Colloquium).
78. *Spin dependant transport in nano-scale tunnel junctions*, QNANO - Swedish Japanese Nano Electronics, Workshop, Neslingen, June 2001. (Invited Talk)
79. *Kinetic Inductance and Cooper Pair tunneling in 1D Josephson Junction Arrays*, CNRS Grenoble, May 2001. (Seminar and visit)
80. *Superconducting Qubit Design with Sample -and-Hold Measurement Strategy*, Supeconducting Nano-electronic Devices, Napels, May 2001. (Invited Talk).
81. *Kinetic Inductance and Cooper Pair tunneling in 1D Josephson Junction Arrays*, Ultra Low Energy Physics: Methods and Phenomonology, Jan. 10-14, 2001, Kisakeskus, Finland (Invited Talk)
82. *Cooper Pair Charge Solitons*. NEC basic research laboratories, March 2000, Tsukuba Japan (Seminar and visit)
83. *Quantum Phase transition on 1D Josephson Junction Arrays*. Mesoscopic Superconductivity 2000, NTT basic research Laboratory, March 2000, Atsugi, Japan (Invited Talk)
84. *Quantum Phase transition in 1D Josephson Junction Arrays*, Low Temperature Laboartory, Feb. 2000, Otanimi, Finland (Seminar and visit).
85. *Quantum Phase transition in 1D Josephson Junction Arrays*, Electron Transport in Mesoscopic Systems, LT22 satalite conference, August 1999, Göteborg Sweden (Invited Talk).

86. *Hysteretic Current-Voltage characteristics and the Coulomb blockade of Cooper pair tunneling.* International Conference on Low Temperature Physics, LT22, August 1999, Otanimi Finland (Contributed Talk)
87. *Superconductor - Insulator Transition in 1D Josephson Junction Arrays: A Direct Observation of diverging Length Scale at a Quantum Critical Point.* Minisymposium: Quantum Phenomena at Low Temperatures, Lami Finalnd, Jan. 7-11, 1998 (Invited Talk).
88. *Charge quantization effects in nanoscale Josephson devices.* International Semiconductor Devices Research Symposium (ISDRS-97), Dec. 1997 (Invited Talk)
89. *Complementarity and duality in Josephson Junction circuits.* Low Temperature Laboartory, University of Helsinki, June, 1997 (Seminar and Visit)
90. *Complementarity and duality in Josephson Junction circuits.* University of Jyveskala, June, 1997 (Seminar and Visit)
91. *Charge and Flux duality in Distributed Superconducting Tunneling structures.* Gordon Research Conference on Superconductivity, Venture California, Jan 1997. (Invited Talk)
92. *Squeezing Superconductivity.* Condensed Matter Seminar, University of Illinois, March 1996. (Invited Talk)
93. *Squeezing Superconductivity.* Physics Department Colloquium, University of Indiana, March, 1996. (Seminar and Visit)
94. *Squeezing Superconductivity.* Condensed Matter Seminar, Iowa State University, March 1996.
95. *Cooper Pair Charge Solitons in a series Josephson Junction Transmission Line.* National Institute of Standards and Technology, Boulder, Colorado, October, 1995. (Seminar and Visit)
96. *Charge Quantization Effects in Superconducting Nanostructures.* 42nd Symposium American Vacuum Society, Minneapolis, Minnesota, October 1995. (Invited Talk)
97. *Charge and Flux Solitons in Josephson Junctions Transmission Lines.* Ericson Components, Stockholm, Sweden, September 1995. (Seminar and Visit)
98. *Cooper Pair Charge Solitons: the Electrodynamics of Localized Charge in a Superconductor.* Nordic Mesoscopic Days, Chalmers / Göteborg University, September 1995. (Contributed Talk)
99. *Cooper Pair Charge Solitons: the Electrodynamics of Localized Charge in a Superconductor.* Condensed Matter Physics Seminar, University of Minnesota, May, 1995 (Seminar and Visit)
100. *Charge quantization Effects in 1D arrays of small Capacitance Josephson Junctions.* Condensed Matter Physics Seminar, Rutgers University, February, 1995. (Invited Talk)
101. *Charge quantization Effects in 1D arrays of small Capacitance Josephson Junctions.* Condensed Matter Physics Seminar, University on North Carolina, Chapel Hill, February 1995. (Invited Talk)
102. *Superconductivity vs. the Coulomb Blockade - Complementary Measurements of a Coherent State.* Physics Department Colloquium, University on North Carolina, Chapel Hill, February 1995 (Invited Talk).
103. *Superconductivity vs. the Coulomb Blockade - Complementary Measurements of a Coherent State.* Hamburg Symposium on the Physics of Microstructures, January 1995. (Invited Talk)
104. *Josephson Effect versus the Coulomb Blockade: Complementary measurements of a Coherent State.* Physics Department Colloquium, Cornell University, May 1994. (Invited Talk)
105. *The Complementary nature of Charge and Flux in Mesoscopic Josephson Junctions.* Physics Department Colloquium, University of Utah, March 1994.
106. *The Complementary nature of Charge and Flux in Mesoscopic Josephson Junctions.* James Frank Institute Colloquium, University of Chicago, March, 1994.
107. *Experiments with the Superconducting double-tunnel-junction in high and low Impedance environments.* NATO-ARW on Mesoscopic Superconductivity, Karlsruhe, May 1994.
108. *Resonant Tunneling of Cooper Pairs in the Superconducting Single Electron Transistor.* March Meeting of the American Physical Society, Pittsburgh, PA, March 1994.
109. *Cooper Pair Tunneling in Small Capacitance Electronic Circuits,* Swedish Physical Society Meeting, Division of Condensed Matter Physics, Umeå, Sweden, November 1993.
110. *Resonant Tunneling of Cooper Pairs in the Superconducting Single Electron Transistor.* 1st International Workshop of the European Research Network on the Physics and Technology of Mesoscopic Systems, Würzberg, Germany, October 1993.
111. *Experiments with Small Capacitance Superconducting Double-Tunnel-Junctions.* Nordic Mesoscopic days, Göteborg Sweden, April 1993.
112. *Charging Effects in Small Superconducting Tunnel Junctions.* Condensed Matter Physics Seminar, Department of Physics, Iowa State University, Feb. 1993.

113. *Coulomb Blockade in Josephson Tunnel Junctions*. MIDIT Day on Low Temperature Superconductive Circuits and Single Electron Tunneling Devices, Technical University of Denmark, Lungby, November 10, 1992.
114. *Experimental Evidence for Coulomb blockade of Cooper Pair Tunneling and the Bloch Oscillations*. NORDITA Workshop on Nanostructures and Mesoscopic Physics, Trondheim Norway, June 1992.
115. *Experimental Realization of Charging Effects in Ultrasmall Tunnel Junctions*. Trondheim Summer School on Mesoscopic Physics, Trondheim, Norway, June 1992.
116. *The Coulomb Blockade of Cooper Pair Tunneling in Ultrasmall Josephson Junctions*. Nobel Jubilee Symposium on Low Dimensional Properties of Solids, Göteborg, Sweden, Dec 1991.
117. *Observation of the Coulomb blockade of Cooper Pair Tunneling and the Bloch Oscillations*. The Institute of Physics Meeting on Coulomb Blockade and Single Electron Effects, Nottingham, England, October 1991
118. *The Onset of Superconductivity in Two Dimensional Disordered Systems*. NORDITA Condensed Matter Physics seminar, Copenhagen, Denmark, March 1990.

Popular Talks:

1. Att skapa känslan för material på nanometernivån. KVA lärardagen, Maj 2012, Trohättan.
2. *Att Bygga en Kvantmaskin med Nanoteknik*. Fysikensdag, 2006, Albanova.
3. *Nanotechnology and Quantum Computation*. Lecture and lab tour for Friends of the Technical Museum, Stockholm.
4. *Gas, flytande, fasta tillstånd och temperaturer* – demonstration to elementary school students with liquid nitrogen (1998, 1999)
5. *Mesoscopic Physics*. LARK visit to KTH (Swedish high school students interested in research), November 1999
6. *Quantum Mechanics and Future Electronic Devices*. Public lecture at KTH for young highschool students in the Stockholm area. October 1999
7. *Future Electronics at the Nanoscale*. LARK visit to KTH (Swedish high school students interested in research), November 1998