

Project B2 'Electron Transport in Nanostructures'

B2.2 'Single-Electron Effects in Nanostructures' (G. Schön, A. Shnirman)

- [B2.2:1] J. Aghassi, A. Thielmann, M.H. Hettler, and G. Schön, *Strongly enhanced shot noise in chains of quantum dots*, Appl. Phys. Lett. **89**, 052101 (2006)
- [B2.2:2] J. Aghassi, A. Thielmann, M.H. Hettler, and G. Schön, *Shot noise in transport through two coherent strongly coupled quantum dots*, Phys. Rev. B **73**, 195323 (2006)
- [B2.2:3] ‡ Y. Utsumi, D.S. Golubev, and G. Schön, *Full counting statistics for a single-electron transistor, non-equilibrium effects at intermediate conductance*, Phys. Rev. Lett. **96**, 086803 (2006)
- [B2.2:4] R.K. Kaul, G. Zarand, S. Chandrasekharan, D. Ullmo, and H.U. Baranger, *Spectroscopy of the Kondo Problem in a Box*, Phys. Rev. Lett. **96**, 176802 (2006)
- [B2.2:5] *‡ G. Zarand, C.-H. Chung, P. Simon, and M. Vojta, *Quantum criticality in a double quantum-dot system*, Phys. Rev. Lett. **97**, 166802 (2006)
- [B2.2:6] ‡ M. Hruska, L. Bulaevskii, A. Shnirman, and D. Smith, *Effects of a single quantum spin on Josephson oscillations*, Int. J. Mod. Phys. B **20**, 2779 (2006)
- [B2.2:7] I. Bausmerth, U.R. Fischer, and A. Posazhennikova, *A Quantum Top Inside a Bose Josephson Junction*, Phys. Rev. A **75**, 053605 (2007)
- [B2.2:8] ‡ J.N. Pedersen, B. Lassen, A. Wacker, and M.H. Hettler, *Coherent transport through an interacting double quantum dot: Beyond sequential tunnelling*, Phys. Rev. B **75**, 235314 (2007)
- [B2.2:9] ‡ A. Posazhennikova, B. Bayani, and P. Coleman, *Conductance of a spin-1 quantum dot: the two-stage Kondo effect*, Phys. Rev. B **75**, 245329 (2007)
- [B2.2:10] Y. Utsumi, *Full counting statistics for the number of electrons dwelling in a quantum dot*, Phys. Rev. B **75**, 035333 (2007)
- [B2.2:11] ‡ M. Sindel, L. Borda, J. Martinek, R. Bulla, J. König, G. Schön, S. Maekawa, and J. von Delft, *Kondo quantum dot coupled to ferromagnetic leads: Numerical renormalization group study*, Phys. Rev. B **76**, 045321 (2007)
- [B2.2:12] ‡ S. Legel, J. König, G. Burkard, and G. Schön, *Generation of spin entanglement in nonequilibrium quantum dots*, Phys. Rev. B **76**, 085335 (2007)
- [B2.2:13] ‡ A.I. Toth, L. Borda, J. von Delft, and G. Zarand, *Dynamical conductance in the two-channel Kondo regime of a double dot system*, Phys. Rev. B **76**, 155318 (2007)
- [B2.2:14] ‡ J. Martinek, L. Borda, Y. Utsumi, J. König, J. von Delft, D.C. Ralph, G. Schön, and S. Maekawa, *Kondo effect in single-molecule spintronics devices*, J. Magn. Mater. **310**, e343 (2007)
- [B2.2:15] ‡ V. Brosco, R. Fazio, F.W.J. Hekking, and A. Joye, *Non-Abelian superconducting pumps*, Phys. Rev. Lett. **100**, 027002 (2008)
- [B2.2:16] U.R. Fischer, C. Iniotakis, and A. Posazhennikova, *Coherent particle oscillations between two Bose-Einstein condensates mediated by a single localized impurity atom*, Phys. Rev. A **77**, 031602(R) (2008)
- [B2.2:17] J. Aghassi, M.H. Hettler, and G. Schön, *Co-tunneling assisted sequential tunneling in multi-level quantum dots*, Appl. Phys. Lett. **92**, 202101 (2008)
- [B2.2:18] S. Legel, J. König, and G. Schön, *Generation and detection of spin entanglement in nonequilibrium quantum dots*, New J. Phys. **10**, 045016 (2008)

- [B2.2:19] ‡ Y. Utsumi, D.S. Golubev, and G. Schön, *Full counting statistics for electron number in quantum dots*, *phys. stat. sol. (c)* **5**, 154 (2008)
- [B2.2:20] ‡ A.I. Toth and G. Zarand, *Dynamical correlations in the spin-half two-channel Kondo model*, *Phys. Rev. B* **78**, 165130 (2008)
- [B2.2:21] A.I. Toth, C.P. Moca, O. Legeza, and G. Zarand, *Density matrix numerical renormalization group for non-Abelian symmetries*, *Phys. Rev. B* **78**, 245109 (2008)
- [B2.2:22] M. Leijnse, M.R. Wegewijs, and M.H. Hettler, *Pair-tunneling resonance in the single-electron transport regime*, *Phys. Rev. Lett.* **103**, 156803 (2009)
- [B2.2:23] ‡ A.G. Semenov, D.S. Golubev, and A.D. Zaikin, *Aharonov-Bohm oscillations in coupled quantum dots: Effect of electron-electron interactions*, *Phys. Rev. B* **79**, 115302 (2009)
- [B2.2:24] ‡ R. Rahman, S.H. Park, J.H. Cole, A.D. Greentree, R.P. Muller, G. Klimeck, and L.C.L. Hollenberg, *Atomistic simulations of adiabatic coherent electron transport in triple donor systems*, *Phys. Rev. B* **80**, 035302 (2009)
- [B2.2:25] ‡ L.T. Hall, J.H. Cole, C.D. Hill, and L.C.L. Hollenberg, *Sensing of fluctuating nanoscale magnetic fields using Nitrogen-Vacancy centers in diamond*, *Phys. Rev. Lett.* **103**, 220802 (2009)
- [B2.2:26] ‡ D. Maclaurin, A.D. Greentree, J.H. Cole, L.C.L. Hollenberg, and A.M. Martin, *Single atom-scale diamond defect allows large Aharonov-Casher phase*, *Phys. Rev. A* **80**, 040104(R) (2009)
- [B2.2:27] ‡ Y. Utsumi, D.S. Golubev, M. Marthaler, K. Saito, T. Fujisawa, and G. Schön, *Bidirectional single-electron counting and the fluctuation theorem*, *Phys. Rev. B* **81**, 125331 (2010)
- [B2.2:28] ‡ Y. Utsumi, D.S. Golubev, M. Marthaler, T. Fujisawa, and G. Schön, *Single-electron counting and the fluctuation theorem*, pp. 397-414, in "Perspectives of Mesoscopic Physics - dedicated to Joseph Imry's 70th Birthday", Eds. A. Aharoni and O. Entin-Wohlman, World Scientific (2010), ISBN-13: 978-981-4299-43-5
- [B2.2:29] ‡ D.S. Golubev, M. Marthaler, Y. Utsumi, and G. Schön, *Statistics of voltage fluctuations in resistively shunted Josephson junctions*, *Phys. Rev. B* **81**, 184516 (2010)
- [B2.2:30] ‡ J.P. Pekola, V. Brosco, M. Möttönen, P. Solinas, and A. Shnirman, *Decoherence in adiabatic quantum evolution: Application to Cooper pair pumping*, *Phys. Rev. Lett.* **105**, 030401 (2010)
- [B2.2:31] ‡ V. Brosco, M. Jerger, P. San-Jose, G. Zarand, A. Shnirman, and G. Schön, *Resonant all-electric spin pumping with spin-orbit coupling*, *Phys. Rev. B* **82**, 041309(R) (2010)
- [B2.2:32] D.S. Golubev and A.D. Zaikin, *Shot noise and Coulomb effects on nonlocal electron transport in normal-metal/superconductor/normal-metal heterostructures*, *Phys. Rev. B* **82**, 134508 (2010)
- [B2.2:33] ‡ O. Zilberberg, A. Romito, and Y. Gefen, *Charge sensing amplification via weak values measurement*, *Phys. Rev. Lett.* **106**, 080405 (2011)
- [B2.2:34] ‡ Yu.A. Pashkin, H. Im, J. Leppäkangas, T.F. Li, O. Astafiev, A.A. Abdumalikov Jr., E. Thuneberg, and J.S. Tsai, *Charge transport through ultrasmall single and double Josephson junctions coupled to resonant modes of the electromagnetic environment*, *Phys. Rev. B* **83**, 020502(R) (2011)

- [B2.2:35] J. Leppäkangas, M. Marthaler, and G. Schön, *Phase-dependent quasiparticle tunneling in Josephson junctions: Measuring the cos-phi term with a superconducting charge qubit*, Phys. Rev. B **84**, 060505 (2011)
- [B2.2:36] ‡ D.S. Golubev, Y. Utsumi, M. Marthaler, and G. Schön, *Fluctuation theorem for a double quantum dot coupled to a point-contact electrometer*, Phys. Rev. B **84**, 075323 (2011)
- [B2.2:37] ‡ B. Küng, C. Rössler, M. Beck, M. Marthaler, D.S. Golubev, Y. Utsumi, T. Ihn, and K. Ensslin, *Irreversibility on the Level of Single-Electron Tunneling*, arXiv:1107.4240 [cond-mat.mes-hall]

B2.6 ,Theory of Superconducting and Ferromagnetic Heterostructures' (G. Schön, M. Eschrig)

- [B2.6:1] ‡ V. Shelukhin, A. Tsukernik, M. Karpovski, Y. Blum, K.B. Efetov, A.F. Volkov, T. Champel, M. Eschrig, T. Löfwander, G. Schön, and A. Palevski, *Observation of periodic π -phase shifts in ferromagnet-superconductor multilayers*, Phys. Rev. B **73**, 174506 (2006)
- [B2.6:2] ‡ J.C. Cuevas, J. Hammer, J. Kopu, J.K. Viljas, and M. Eschrig, *Proximity effect and multiple Andreev reflections in diffusive SNS junctions*, Phys. Rev. B **73**, 184505 (2006)
- [B2.6:3] ‡ K. Tanaka, D.F. Agterberg, J. Kopu, and M. Eschrig, *Effects of ballistic and diffusive motion of quasiparticles on spectral properties around a vortex in a two-band superconductor*, Phys. Rev. B **73**, 220501(R) (2006)
- [B2.6:4] ‡ M. Ternes, W.-D. Schneider, J.C. Cuevas, C.P. Lutz, C.F. Hirjibehedin, and A.J. Heinrich, *Subgap structure in asymmetric superconducting tunnel junctions*, Phys. Rev. B **74**, 132501 (2006)
- [B2.6:5] ‡ M.S. Kalenkov, H. Kloos, and A.D. Zaikin, *Minigap, parity effect, and persistent currents in SNS nanorings*, Phys. Rev. B **74**, 184502 (2006)
- [B2.6:6] ‡ M. Eschrig, T. Löfwander, T. Champel, J.C. Cuevas, J. Kopu, and G. Schön, *Symmetries of pairing correlations in superconductor-ferromagnet nanostructures*, J. Low Temp. Phys. **147**, 457 (2007)
- [B2.6:7] ‡ T. Löfwander, T. Champel, and M. Eschrig, *Phase diagrams of ferromagnet-superconductor multilayers with misaligned exchange fields*, Phys. Rev. B **75**, 014512 (2007)
- [B2.6:8] ‡ M.S. Kalenkov and A.D. Zaikin, *Nonlocal Andreev reflection at high transmissions*, Phys. Rev. B **75**, 172503 (2007)
- [B2.6:9] ‡ K. Tanaka, M. Eschrig, and D.F. Agterberg, *Theory of vortices in hybridized ballistic/diffusive-band superconductors*, Phys. Rev. B **75**, 214512 (2007)
- [B2.6:10] D.S. Golubev and A.D. Zaikin, *Non-local Andreev reflection in superconducting quantum dots*, Phys. Rev. B **76**, 184510 (2007)
- [B2.6:11] ‡ M.S. Kalenkov and A.D. Zaikin, *Crossed Andreev reflection at spin-active interfaces*, Phys. Rev. B **76**, 224506 (2007)
- [B2.6:12] ‡ M.S. Kalenkov and A.D. Zaikin, *Spin-resolved crossed Andreev reflection in ballistic heterostructures*, Physica E **40**, 147 (2007)
- [B2.6:13] ‡ K.Yu. Arutyunov, D.S. Golubev, and A.D. Zaikin, *Superconductivity in one dimension*, Phys. Rep. **464**, 1 (2008)
- [B2.6:14] ‡ M. Eschrig and T. Löfwander, *Triplet supercurrents in clean and disordered half-metallic ferromagnets*, Nature Phys. **4**, 138 (2008)
- [B2.6:15] ‡ T. Champel, T. Löfwander, and M. Eschrig, *$0-\pi$ transitions in a superconductor/chiral ferromagnet/superconductor junction induced by a homogeneous cycloidal spiral*, Phys. Rev. Lett. **100**, 077003 (2008)
- [B2.6:16] ‡ A.V. Galaktionov, M.S. Kalenkov, and A.D. Zaikin, *Josephson current and Andreev states in superconductor-half metal-superconductor heterostructures*, Phys. Rev. B **77**, 094520 (2008)
- [B2.6:17] ‡ M.S. Kalenkov and A.D. Zaikin, *Non-local electron transport and cross-resistance peak in NSN heterostructures*, JETP Lett. **87**, 140 (2008) [Pis'ma v ZhETF **87**, 166 (2008)]

- [B2.6:18] ‡ A. Vorontsov, I. Vekhter, and M. Eschrig, *Andreev bound states in non-centrosymmetric superconductors*, Physica B **403**, 1095 (2008)
- [B2.6:19] ‡ A.B. Vorontsov, I. Vekhter, and M. Eschrig, *Surface bound states and spin currents in non-centrosymmetric superconductors*, Phys. Rev. Lett. **101**, 127003 (2008)
- [B2.6:20] ‡ A.B. Vorontsov, I. Vekhter, and M. Eschrig, *Surface states in superconductors with no inversion symmetry*, J. Phys. Soc. Jpn. **77**, Suppl. A, 165 (2008)
- [B2.6:21] ‡ J. Linder, T. Yokoyama, A. Sudbo, and M. Eschrig, *Pairing Symmetry Conversion by Spin-Active Interfaces in Magnetic Normal-Metal-Superconductor Junctions*, Phys. Rev. Lett. **102**, 107008 (2009)
- [B2.6:22] ‡ M. Eschrig, *Superconductor-Metal Heterostructures: Coherent conductors at a distance*, Nature Physics **5**, 384 (2009)
- [B2.6:23] ‡ R. Grein, M. Eschrig, G. Metalidis, and G. Schön, *Spin-Dependent Cooper Pair Phase and Pure Spin Supercurrents in Strongly Polarized Ferromagnets*, Phys. Rev. Lett. **102**, 227005 (2009)
- [B2.6:24] ‡ D.S. Golubev, M.S. Kalenkov, and A.D. Zaikin, *Crossed Andreev reflection and charge imbalance in diffusive Normal-Superconducting-Normal structures*, Phys. Rev. Lett. **103**, 067006 (2009)
- [B2.6:25] D.S. Golubev and A.D. Zaikin, *Non-local Andreev reflection under ac bias*, Europhys. Lett. **86**, 37009 (2009)
- [B2.6:26] ‡ M. Eschrig, *Scattering problem in nonequilibrium quasiclassical theory of metals and superconductors: General boundary conditions and applications*, Phys. Rev. B **80**, 134511 (2009)
- [B2.6:27] ‡ R. Grein, T. Löfwander, G. Metalidis, and M. Eschrig, *Theory of superconductor-ferromagnet point-contact spectra: The case of strong spin polarization*, Phys. Rev. B **81**, 094508 (2010)
- [B2.6:28] ‡ J. Linder, A. Sudbø, T. Yokoyama, R. Grein, and M. Eschrig, *Signature of odd-frequency pairing correlations induced by a magnetic interface*, Phys. Rev. B **81**, 214504 (2010)
- [B2.6:29] G. Metalidis, M. Eschrig, R. Grein, and G. Schön, *Nonlocal conductance via overlapping Andreev bound states in ferromagnet-superconductor heterostructures*, Phys. Rev. B **82**, 180503(R) (2010)
- [B2.6:30] A. Kleine, A. Baumgartner, J. Trbovic, D.S. Golubev, A.D. Zaikin, and C. Schönenberger, *Magnetic field and contact resistance dependence of non-local charge imbalance*, Nanotechnology **21**, 274002 (2010)
- [B2.6:31] D.S. Golubev and A.D. Zaikin, *Shot noise and Coulomb effects on nonlocal electron transport in normal-metal/superconductor/normal-metal heterostructures*, Phys. Rev. B **82**, 134508 (2010)
- [B2.6:32] ‡ M. Eschrig, C. Iniotakis, and Y. Tanaka, *Theoretical aspects of Andreev spectroscopy and tunneling spectroscopy in non-centrosymmetric superconductors: a topical review*, Chapter in book on “Non-centrosymmetric Superconductivity”, edited by M. Sigrist and E. Bauer, to appear in Springer Verlag, arXiv:1001.2486 [cond-mat.supr-con]
- [B2.6:33] ‡ T. Löfwander, R. Grein, and M. Eschrig, *Is CrO₂ Fully Spin-Polarized? Analysis of Andreev Spectra and Excess Current*, Phys. Rev. Lett. **105**, 207001 (2010)
- [B2.6:34] ‡ A. Kleine, A. Baumgartner, J. Trbovic, D.S. Golubev, A.D. Zaikin, and C. Schoenenberger, *Magnetic field and contact resistance dependence of non-local charge imbalance*, Nanotechnol. **21**, 274002 (2010)

- [B2.6:35] ‡ S. Piano, R. Grein, C.J. Mellor, K. Vyborny, R. Campion, M. Wang, M. Eschrig, and B.L. Gallagher, *Spin polarization of (Ga,Mn)As measured by Andreev spectroscopy: The role of spin-active scattering*, Phys. Rev. B **83**, 0871305(R) (2011)
- [B2.6:36] A. Heimes, R. Grein, and M. Eschrig, *Electronic dispersion anomalies in iron pnictide superconductors*, Phys. Rev. Lett. **106**, 047003 (2011)
- [B2.6:37] ‡ M. Eschrig, C. Iniotakis, and Y. Tanaka, *Theoretical aspects of Andreev spectroscopy and tunneling spectroscopy in non-centrosymmetric superconductors: a topical review*, in "Non-centrosymmetric Superconductivity", edited by M. Sigrist and E. Bauer, to appear in Springer Verlag, arXiv:1001.2486 [cond-mat.supr-con]
- [B2.6:38] ‡ R. Grein, J. Michelsen, and M. Eschrig, *A Numerical Study of the Superconducting Proximity Effect in Topological Surface States*, arXiv:1111.0445

B2.10 (J. Schmalian, F. Evers, P. Schmitteckert, P. Wölfle)

- [B2.10:1] ‡ K. Burke, M. Köntopp, and F. Evers, *Zero-bias molecular electronics: Exchange corrections to Landauer's formula*, Phys. Rev. B **73**, 121403(R) (2006)
- [B2.10:2] ‡ D. Bohr, P. Schmitteckert, and P. Wölfle, *DMRG evaluation of the Kubo formula –Conductance of strongly interacting quantum systems*, Europhys. Lett. **73**, 246 (2006)
- [B2.10:3] ‡ V.V. Maslyuk, A. Bagrets, V. Meded, A. Arnold, F. Evers, M. Brandbyge, T. Bredow, and I. Mertig, *Organometallic Benzene-Vanadium Wire: A one-dimensional half-metallic ferromagnet*, Phys. Rev. Lett. **97**, 097201 (2006)
- [B2.10:4] ‡ R.A. Molina, J. Dukelsky, and P. Schmitteckert, *Commensurability effects for fermionic atoms trapped in 1D optical lattices*, Phys. Rev. Lett. **99**, 080404 (2007)
- [B2.10:5] ‡ F. Evers and K. Burke, *Pride, prejudice and perjury of ab-initio transport calculations for single molecules*, *CRC Handbook of Molecular Electronics*, ed. S. Lyshevski, Chap. **24**, Taylor & Francis (2007)
- [B2.10:6] ‡ G. Schneider and P. Schmitteckert, *Signal transport and finite bias conductance in and through correlated nanostructures*, p. 113-126 in W.E. Nagel, W. Jäger, M. Resch (eds), "*High Performance computing in Science and Engineering '06*", Springer Verlag, Berlin, Heidelberg 2006, ISBN 978-3-540-36165-7
- [B2.10:7] P. Schmitteckert, *Signal transport in and conductance of correlated nanostructures*, in W.E. Nagel, W. Jäger, M. Resch, (eds), "*High Performance computing in Science and Engineering '07*", Springer Verlag, Berlin, Heidelberg 2007, ISBN 978-3-540-74738-3
- [B2.10:8] ‡ D. Bohr and P. Schmitteckert, *Strong enhancement of transport by interaction on contact links*, Phys. Rev. B **75**, 241103(R) (2007)
- [B2.10:9] P. Schmitteckert and F. Evers, *Exact ground state density functional theory for impurity models and transport calculations*, Phys. Rev. Lett. **100**, 086401 (2008)
- [B2.10:10] ‡ X. Waintal, G. Fleury, K. Kazymyrenko, M. Houzet, P. Schmitteckert, and D. Weinmann, *Persistent currents in one dimension: The counterpart of Leggett's theorem*, Phys. Rev. Lett. **101**, 106804 (2008)
- [B2.10:11] ‡ E. Boulat, H. Saleur, and P. Schmitteckert, *Twofold advance in the theoretical understanding of far-from-equilibrium properties of interacting nanostructures*, Phys. Rev. Lett. **101**, 140601 (2008)
- [B2.10:12] T. Ulbricht and P. Schmitteckert, *Signal transport in and conductance of correlated nanostructures*, in W.E. Nagel, W. Jäger, M. Resch, (eds), "*High Performance computing in Science and Engineering '08*", Springer Verlag Berlin, Heidelberg 2008, ISBN 978-3-540-74738-3
- [B2.10:13] P. Schmitteckert and F. Evers, *Exact ground state density-functional theory for impurity models coupled to external reservoirs and transport calculations*, Phys. Rev. Lett. **100**, 086401 (2008)
- [B2.10:14] M. Führinger, S. Rachel, R. Thomale, M. Greiter, and P. Schmitteckert, *DMRG Studies of critical SU(N) spin chains*, Ann. Phys. (Berlin) **17**, 922 (2008)
- [B2.10:15] ‡ Z.-X. Hu, X. Wan, and P. Schmitteckert, *Trapping Abelian anyons in fractional Quantum Hall droplets*, Phys. Rev. B **77**, 075331 (2008)
- [B2.10:16] * ‡ A. Mishchenko, D. Vonlanthen, V. Meded, M. Bürkle, C. Li, I.V. Pobelov, A. Bagrets, J.K. Viljas, F. Pauly, F. Evers, M. Mayor, and T. Wandlowski, *Influence of Conformation on Conductance of Biphenyl-Dithiol Single-Molecule Contacts*, Nano Lett. **10**, 156 (2010)

- [B2.10:17] ‡ A. Branschädel, T. Ulbricht, P. Schmitteckert, *Conductance of correlated Nanostructures*, in: W.E. Nagel, D. Kröner, M. Resch (eds), High Performance Computing in Science and Engineering 2009, Springer Verlag, Berlin, Heidelberg 200, ISBN: 978-3-642-04664-3 (2009)
- [B2.10:18] T. Ulbricht and P. Schmitteckert, *Is spin-charge separation observable in a transport experiment?*, Europhys. Lett. **86**, 57006 (2009)
- [B2.10:19] ‡ J.N. Pedersen, D. Bohr, A. Wacker, T. Novotny, P. Schmitteckert, and K. Flensberg, *Interplay between interference and Coulomb interaction in the ferromagnetic Anderson model with applied magnetic field*, Phys. Rev. B **79**, 125403 (2009)
- [B2.10:20] * P. Longo, P. Schmitteckert, and K. Busch, *Dynamics of photon transport through Quantum impurities in dispersion-engineered one-dimensional systems*, J. Opt. A: Pure Appl. Opt. **11**, 114009 (2009)
- [B2.10:21] ‡ R.A. Molina, J. Dukelsky, and P. Schmitteckert, *Crystallization of trions in SU(3) cold-atom gases trapped in optical lattices*, Phys. Rev. A **80**, 013616 (2009)
- [B2.10:22] ‡ R.A. Molina, J. Dukelsky, and P. Schmitteckert, *Comment on "Spectral signatures of the Fulde-Ferrell-Larkin-Ovchinnikov order parameter in one-dimensional optical lattices"*, Phys. Rev. Lett. **102**, 168901 (2009)
- [B2.10:23] T. Ulbricht and P. Schmitteckert, *Tracking spin and charge with spectroscopy in spin-polarised 1D systems*, Europhys. Lett. **89**, 47001 (2010)
- [B2.10:24] * P. Longo, P. Schmitteckert, and K. Busch, *Few-photon transport in low-dimensional systems: Interactions-induced radiation trapping*, Phys. Rev. Lett. **104**, 023602 (2010)
- [B2.10:25] * D.N. Aristov and P. Wölfle, *Transport of interacting electrons through a potential barrier: nonperturbative RG approach*, Europhys. Lett. **82**, 27001 (2008)
- [B2.10:26] * D.N. Aristov and P. Wölfle, *Conductance through a potential barrier embedded in a Luttinger liquid: Nonuniversal scaling at strong coupling*, Phys. Rev. B **80**, 045109 (2009)
- [B2.10:27] * ‡ D.N. Aristov, A.P. Dmitriev, I.V. Gornyi, V.Yu. Kachorovskii, D.G. Polyakov, and P. Wölfle, *Tunneling into a Luttinger Liquid Revisited*, Phys. Rev. Lett. **105**, 266404 (2010)
- [B2.10:28] D.N. Aristov, *Luttinger liquids with curvature: Density correlations and Coulomb drag effect*, Phys. Rev. B **76**, 085327 (2007)
- [B2.10:29] P. Schmitteckert, *Calculating Green Functions from Finite Systems*, J. Phys.: Conf. Ser. **220**, 012022 (2010)
- [B2.10:30] ‡ A. Freyn, G. Vasseur, P. Schmitteckert, D. Weinmann, G.-L. Ingold, R.A. Jalabert, and J.-L. Pichard, *The embedding method beyond the single-channel case*, Eur. Phys. J. B **75**, 253 (2010)
- [B2.10:31] ‡ A. Branschädel, G. Schneider, and P. Schmitteckert, *Conductance of inhomogeneous systems: Real-time dynamics*, Annalen der Physik **522**, 657 (2010)
- [B2.10:32] ‡ T. Ulbricht, R.A. Molina, R. Thomale, and P. Schmitteckert, *Color-charge separation in trapped SU(3) fermionic atoms*, Phys. Rev. A **82**, 011603 (2010)
- [B2.10:33] ‡ A. Branschädel, E. Boulat, H. Saleur, and P. Schmitteckert, *Shot Noise in the Self-Dual Interacting Resonant Level Model*, Phys. Rev. Lett. **105**, 146805 (2010)

- [B2.10:34] ‡ A. Branschädel, E. Boulat, H. Saleur, and P. Schmitteckert, *Numerical evaluation of shot noise using real-time simulations*, Phys. Rev. B **82**, 205414 (2010)
- [B2.10:35] A. Branschädel and P. Schmitteckert, *Conductance and noise correlations of correlated nanostructures*, in: *High Performance Computing in Science and Engineering '10*, Springer, ISBN 978-3-642-15747-9 (2011)
- [B2.10:36] ‡ D.N. Aristov and P. Wölfle, *Transport properties of a Y-junction connecting Luttinger liquid wires*, Phys. Rev. B **84**, 155426 (2011)
- [B2.10:37] ‡ S.T. Carr, D.A. Bagrets, A. Dmitry, and P. Schmitteckert, *Full Counting Statistics in the Self-Dual Interacting Resonant Level Model*, Phys. Rev. Lett. **107**, 206801 (2011)
- [B2.10:38] M. Moliner and P. Schmitteckert, *Integrable impurities as boundary conditions*, Eur. Phys. Lett. **96**, 10010 (2011)
- [B2.10:39] * P. Longo, P. Schmitteckert, and K. Busch, *Few-photon transport in low-dimensional systems*, Phys. Rev. A **83**, 063828 (2011)
- [B2.10:40] F. Evers and P. Schmitteckert, *Broadening of the derivative discontinuity in density functional theory*, Phys. Chem. Chem. Phys. **13**, 14417 (2011)