

## CURRICULUM VITAE

NAME: **Fabian H.L. Essler**  
DATE OF BIRTH: October 15, 1965.  
CITIZENSHIP: German.  
MARITAL STATUS: Married.  
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### ACADEMIC HISTORY:

10/85 - 07/88 : Bayerische Julius Maximilians Universität Würzburg.  
Oct. 1987: Vordiplom in Physics (with distinction)  
Oct. 1987: Vordiplom in Mathematics (very good)  
08/88 - 08/89 : State University of New York at Stony Brook (Exchange program with Würzburg).  
May 1989: MA in Physics.  
09/89 - 10/93 : State University of New York at Stony Brook (PhD Program).  
Aug. 1993: PhD. in Physics.  
09/93 - 08/95 : University of Bonn, Post-doctoral fellow.  
09/95 - 08/98 : Oxford University, Post-doctoral fellow.  
09/98 - 09/99 : Oxford University, EPSRC Advanced Fellow.  
10/99 - 01/00 : King's College London, EPSRC Advanced Fellow and University Lecturer.  
02/00 - 12/03 : Warwick University, EPSRC Advanced Fellow and University Lecturer (since 2002: Reader).  
02/02 - 12/04 : Brookhaven National Laboratory, Associate Physicist.  
since 01/04 : Oxford University, University Lecturer (since 10/06 Professor, since 07/12 Research Professor).  
since 01/04 : Fellow of Worcester College Oxford.

### FELLOWSHIPS:

Fellow of the Studienstiftung des deutschen Volkes, 1988-1991.  
DAAD Fellowship: 1988-1989.  
European Union HCM Fellowship: 1995-1997.  
EPSRC Advanced Fellowship: 1998-2003.

### PROFESSIONAL ACTIVITIES:

Editor of Journal of Statistical Mechanics: Theory and Experiment (2004-present);  
Editor of Journal of Physics A (2006-2011);  
Referee for the AERES (France), NSF (US), DoE (US), DFG (Germany) and EPSRC (UK),  
*Ann. Phys.*, *J. Phys. A*, *JHEP*, *JSTAT*, *Phys. Rev. Lett.*, *Phys. Rev. B*, *Rev. Mod. Phys.*, *Science*.

#### CONFERENCE ORGANIZATION:

1. Workshop on "Field Theory Methods in Nanoscale Systems" Brookhaven National Lab 2003.
2. INSTANS Summer Conference, Como 2006.
3. INSTANS Summer School 2007, Oxford 2007.
4. International Conference on Fields, Lattices and Condensed Matter, Oxford 2007.
5. INSTANS Conference on "Exact Results in Low Dimensional Quantum Systems", Florence 2008.
6. Advisory Cmttee for School on Modern theories of correlated electron systems, Les Houches '09.
7. Topic Cmttee of STATPHYS 24, Cairns '10.
8. Workshop on Non-equilibrium phenomena in low-dimensional cold gases, Royal Holloway '11.
9. Programme & Conference on *New quantum states of matter in and out of equilibrium*, GGI Florence '12.
10. Steering Cmttee of STATPHYS 25, Seoul '13.
11. Workshop on Quantum Integrability, CFT and Topological Quantum Computation , Natal '14.
12. EPSRC Network Plus Workshop on Nonequilibrium Quantum Systems, Nottingham '14.
13. Workshop on Field Theory Methods in Low Dimensional Strongly Correlated Quantum Systems, Trieste '14.

#### INVITED VISITS TO OTHER INSTITUTIONS:

1. Erwin Schrödinger Institut, Vienna, April 1994.
2. Universität Hannover, May/June 1999.
3. Isaac Newton Institute, Cambridge, April/May 2000.
4. University of Queensland, Brisbane, July 2001.
5. Brookhaven National Laboratory, September 2004.
6. ICTP Trieste, August 2005.
7. Brookhaven National Laboratory, March/April 2006.
8. Galileo Galilei Institute Florence, September 2008.
9. University of Melbourne, July 2010.
10. KITP Santa Barbara, October/November 2010.
11. Galileo Galilei Institute Florence, April and May 2012.
12. KITP Santa Barbara, August to October 2012.

#### INVITED CONFERENCES AND WORKSHOPS:

1. NATO ASI Workshop *Physics and Mathematical Physics of the Hubbard Model*, San Sebastian 1993.
2. *Exactly Solvable Models of Strongly Correlated Electrons*, Aspen 1994.
3. Euroconference on Strongly Correlated Electron Systems, Würzburg, 1994.
4. Euroconference on Strongly Correlated Electron Systems, Torino, 1995.
5. *New Developments with Strongly Correlated Electrons*, NORDITA, Copenhagen 1996.
6. *New Symmetries in Quantum Physics*, Torino 1998.
7. CMMP 98, UMIST Manchester 1998.
8. *Cooperative Phenomena in Statistical Physics: Theory and Applications*, Dresden 1999.
9. *1999 Amsterdam Summer workshop on flux, charge, topology and statistics*.
10. *Strongly Correlated Electron Systems*, Newton Insitute, Cambridge 2000.
11. *Exactly solvable models of statistical mechanics and mathematical physics*, APCTP Seoul, 2000.
12. *XII Workshop on strongly correlated electron systems*, ICTP Trieste 2000.
13. *Low-Dimensional Physics in Solids and Trapped Atoms*, NORDITA Copenhagen, 2000.
14. *Symposium on Spin Chains*, March meeting of the APS, Seattle, 2001.

15. Theoretical Magnetism Meeting of the UK Magnetism Group, Oxford, 2001.
16. *2001 Amsterdam Summer workshop on flux, charge, topology and statistics.*
17. *UQ Mathematical Physics Workshop 2001*, Brisbane, 2001.
18. *Summer School on low-dimensional quantum systems: Theory and Experiment*, Trieste, 2001.
19. *International Workshop on Pi-Conjugated Polymers*, Marburg, 2001.
20. *Applications of Conformal Field Theory*, UCLA, 2001.
21. *TH2002*, Paris, 2002.
22. *Low Energy Electron Spectroscopy 02*, Montauk, 2002.
23. *Quantum Magnetism: Microscopic Techniques for Novel States of Matter*, Bad Honnef, 2002.
24. Workshop on *Flux, Charge, Topology and Statistics 2003*, Amsterdam 2003.
25. ISIS-IOP Theoretical Magnetism Meeting, Abingdon 2004.
26. International Workshop on Frustrated Magnetism, Montauk 2004.
27. Workshop on Quantum lattice models, (The Mathematics of Quantum Systems), Warwick 2005.
28. *Lessons from low dimensions - the many aspects of Conformal Field Theory*, Bonn 2005.
29. Low-D Quantum Condensed Matter, Amsterdam 2005.
30. Quantum Magnets in High Magnetic Fields, APS March meeting, Baltimore 2006.
31. INSTANS Summer Conference, Como 2006.
32. Physics and Mathematics of Interacting Quantum Systems in low dimensions, Tokyo 2007.
33. Workshop on Low dimensional Quantum Condensed Matter, Amsterdam 2007.
34. School and Workshop on Highly Frustrated Magnets and Strongly Correlated Systems, Trieste 2007.
35. Workshop on Strong Correlations in low dimensional Transport and Dynamics, Montauk NY 2007.
36. *Algebraic and computational methods for strongly correlated systems*, Gothenburg 2008.
37. International Conference on *Strong Fluctuations in Low Dimensional Systems*, Montauk NY 2008.
38. Workshop on Low-dimensional Quantum Field Theories and Applications, Florence 2008.
39. Workshop on Low-D Quantum Condensed Matter, Amsterdam 2009.
40. *Nonequilibrium Physics from Classical to Quantum Low Dimensional Systems*, Trieste 2009.
41. *Past, Present and Future of the Heisenberg Model*, Brasilia 2009.
42. *Novel states in correlated condensed matter - from model systems to real materials*, Berlin, 2010.
43. *Time-dependent dynamics and non-equilibrium quantum systems*, Budapest 2010.
44. *Exactly Solvable Models in Statistical Physics*, Brisbane 2010.
45. *Quantum Many-Body Physics in One Dimension*, Aspen 2010.
46. NORDITA Programme on Quantum Matter in Low Dimensions, Stockholm 2010.
47. 465. Heraeus Seminar *Analytische und numerische Methoden korrelierter Elektronen*, Bad Honnef, 2010.
48. *Beyond Standard Optical Lattices*, Santa Barbara 2010.
49. *Integrability and its Breaking in Strongly Correlated and Disordered Systems*, Trieste 2011.
50. *Brazilian School on Statistical Mechanics*, Natal 2011.
51. *Quantum Quenches and Strongly Correlated Physics*, Montauk NY 2011.
52. 8th Bologna Workshop on CFT and Integrable Models, Bologna 2011.
53. LOTHERM Summer School 2012, Lubljana 2012.
54. *The Beauty of Integrability, low-dimensional physics, statistical models and solitons*, Natal 2012.
55. *Quantum dynamics in far from equilibrium thermally isolated systems*, KITP Santa Barbara 2012.
56. *Strongly Correlated Physics in the Cuprates*, Montauk NY 2012.
57. Nottingham Workshop in Quantum Non-Equilibrium, Nottingham February 2013.
58. Invited talk at the APS March meeting, Baltimore March 2013.
59. Workshop *New states of matter and their excitations*, Berlin April 2013.

60. Workshop on Mathematical Statistical Physics, Kyoto July 2013.
61. *Quantum many body systems out of equilibrium*, Dresden August 2013.
62. *Korrelationstage 2013*, Dresden September 2013.
63. *School on Statistical Physics*, GGI Florence, February 2014.
64. Workshop on *Many-body localization and associated theory*, Princeton, April 2014.
65. Workshop on Quantum Many Body Dynamics, Perimeter Institute, May 2014.
66. Workshop on *Entanglement Entropy in Many Body Quantum Systems*, London, June 2014.
67. Conference on *Non-equilibrium Phenomena in Condensed Matter and String Theory*, Trieste, July 2014.
68. School on *Non-linear Dynamics, Dynamical Transitions and Instabilities in Classical and Quantum Systems*, Trieste, July 2014.
69. Conference on Condensed Matter Theory and Statistical Physics, Chongqing University, July 2014.
70. Summer Programme on *Many-Body Quantum Systems far from Equilibrium*, Aspen, August 2014.
71. International workshop and seminar on Quantum spin dynamics, Dresden, September 2014.
72. Workshop on New States of Matter and their Excitations, Dresden, September 2014.

LIST OF PUBLICATIONS

MONOGRAPH:

1. "Exact Solution of the Hubbard Model in One Dimension",  
F.H.L. Essler, F. Göhmann, H. Frahm, A. Klümper and V.E. Korepin,  
690 pages, Cambridge University Press, Cambridge (2005);  
ISBN-10: 0521802628 — ISBN-13: 9780521802628

PUBLICATIONS IN REFEREED JOURNALS:

103. "Real-time dynamics in the one-dimensional Hubbard model"  
L. Seabra, F.H.L. Essler, F. Pollmann, I. Schneider and T. Veness  
Phys. Rev. B 90, 245127 (2014).
102. "Quasi-particle breakdown in the quasi-one-dimensional Ising ferromagnet  $\text{CoNb}_2\text{O}_6$ "  
N.J. Robinson, F.H.L. Essler, I. Cabrera and R. Coldea  
Phys. Rev. B 90, 174406 (2014).
101. "Quantum quench in the sine-Gordon model"  
B. Bertini, D. Schuricht and F.H.L. Essler  
J. Stat. Mech. P10035 (2014).
100. "Light-cone dynamics after quantum quenches in spin chains"  
L. Bonnes, F.H.L. Essler and A. Läuchli  
Phys. Rev. Lett. 113, 187203 (2014).
99. "Entanglement Entropies of the quarter-filled Hubbard model"  
P. Calabrese, F.H.L. Essler and A. Läuchli  
J. Stat. Mech. P09025 (2014).
98. "Quench dynamics in a model with tuneable integrability breaking"  
F.H.L. Essler, S. Kehrein, S.R. Manmana and N.J. Robinson  
Phys. Rev. B89, 165104 (2014).
97. "Relaxation after quantum quenches in the spin-1/2 Heisenberg XXZ chain"  
M. Fagotti, M. Collura, F.H.L. Essler and P. Calabrese  
Phys. Rev. B89, 125101 (2014).
96. "Stationary behaviour of observables after a quantum quench in the spin-1/2 Heisenberg XXZ chain"  
F.H.L. Essler and M. Fagotti  
J. Stat. Mech. P07012, (2013).
95. "Reduced Density Matrix after a Quantum Quench"  
F.H.L. Essler and M. Fagotti  
Phys. Rev. B87, 245107 (2013).
94. "Time evolution of local observables after quenching to an integrable model"  
J.S Caux and F.H.L. Essler  
Phys. Rev. Lett. 110, 257203 (2013).
93. "Shell-Filling Effect in the Entanglement Entropies of Spinful Fermions "  
F.H.L. Essler, A. Läuchli and P. Calabrese  
Phys. Rev. Lett. 110, 115701 (2013).
92. "Dynamical Correlations after a Quantum Quench "  
F.H.L. Essler, S. Evangelisti and M. Fagotti  
Phys. Rev. Lett. 109, 247206 (2012).
91. "Quantum Quench in the Transverse Field Ising chain II: Stationary State Properties "  
P. Calabrese, F.H.L. Essler and M. Fagotti  
J. Stat. Mech. P07022 (2012).
90. "Quantum Quench in the Transverse Field Ising chain I: Time evolution of order parameter correlators"  
P. Calabrese, F.H.L. Essler and M. Fagotti  
J. Stat. Mech. P07016 (2012).

89. "Dynamics in the Ising field theory after a quantum quench"  
D. Schuricht and F.H.L. Essler  
J. Stat. Mech. P04017 (2012).
88. "Finite Wave Vector Pairing in Doped Two-Leg Ladders"  
N.J. Robinson, F.H.L. Essler, E. Jeckelmann and A.M. Tsvelik  
Phys. Rev. **B85**, 014402 (2012).
87. "Discrete Symmetry Breaking Transitions Between Paired Superfluids"  
M.J. Bhaseen, S. Ejima, F.H.L. Essler, H. Fehske, M. Hohenadler and B.D. Simons  
Phys. Rev. **A85**, 033636 (2012).
86. "Observation of Complex Bound States in the Spin-1/2 Heisenberg XXZ Chain using Local Quantum Quenches"  
M. Ganahl, E. Rabel, F.H.L. Essler and H.-G. Evertz  
Phys. Rev. Lett. **108**, 077206 (2012).
85. "Anomalous Dynamical Line Shapes in a Quantum Magnet at Finite Temperature"  
D.A. Tennant, B. Lake, A.J.A. James, F.H.L. Essler, S. Notbohm, H.-J. Mikeska, J. Fielden, P. Koegerler, P.C. Canfield and M.T.M. Telling  
Phys. Rev. **B85**, 014402 (2012).
84. "Magnetic Properties of the Second Mott Lobe in Pairing Hamiltonians"  
M.J. Bhaseen, S. Ejima, M. Hohenadler, A.O. Silver, F.H.L. Essler, H. Fehske and B.D. Simons  
Phys. Rev. **A84**, 023635 (2011).
83. "Quantum Quench in the Transverse Field Ising Model"  
P. Calabrese, F.H.L. Essler and M. Fagotti  
Phys. Rev. Lett. **106**, 227203 (2011).
82. "Current large deviation function for the open asymmetric simple exclusion process"  
J. de Gier and F.H.L. Essler  
Phys. Rev. Lett. **107**, 010602 (2011).
81. "Phase diagram and continuous pair-unbinding transition in the bilinear-biquadratic S=1 Heisenberg chain in a magnetic field"  
S.R. Manmana, A.M. Luchli, F.H.L. Essler and F. Mila  
Phys.Rev. **B83**, 184433 (2011).
80. "Boundary Effects on the Local density of states of 1D Mott insulators and CDW states"  
D. Schuricht, F.H.L. Essler, A. Jaefari and E. Fradkin  
Phys.Rev. **B83**, 035111 (2011).
79. "Ising Deconfinement Transition between Feshbach Resonant Superfluids"  
S. Ejima, M.J. Bhaseen, M. Hohenadler, F.H.L. Essler, H. Fehske and B.D. Simons  
Phys. Rev. Lett. **106**, 015303 (2011).
78. "Low Temperature Dynamical Structure Factor of the 2-Leg spin-1/2 Heisenberg Ladder"  
W.D. Goetze, U. Karahasanovic and F.H.L. Essler  
Phys. Rev. **B82**, 104417 (2010).
77. "Universal Corrections to Scaling for Block Entanglement in Spin-1/2 XX Chains"  
P. Calabrese and F.H.L. Essler  
J. Stat. Mech. Theor. Exp., P08029 (2010).
76. "Effects of Thermal Phase Fluctuations in a 2D Superconductor: an Exact Result for the Spectral Function"  
A.M. Tsvelik and F.H.L. Essler  
Phys. Rev. Lett. **105**, 027002 (2010).
75. "Threshold Singularities in the One-Dimensional Hubbard Model"  
F.H.L. Essler  
Phys. Rev. **B81**, 205120 (2010).

74. "Parity Effects in the Scaling of Block Entanglement in Gapless Spin Chains"  
P. Calabrese, M. Campostrini, F.H.L. Essler, and B. Nienhuis  
Phys. Rev. Lett. **104**, 095701 (2010).
73. "Finite Temperature Dynamical Correlations in Massive Integrable Quantum Field Theories"  
F.H.L. Essler and R.M. Konik  
J. Stat. Mech.: Theor. Exp. P09018 (2009).
72. "Finite Temperature Dynamical Structure Factor of the Heisenberg-Ising Chain"  
A.J.A. James, W.D. Goetze and F.H.L. Essler  
Phys. Rev. **B79**, 214408 (2009).
71. "On the Spin-liquid Phase of One Dimensional Spin-1 Bosons"  
F.H.L. Essler, G.V. Shlyapnikov and A.M. Tsvelik  
J. Stat. Mech.: Theor. Exp. P02027 (2009).
70. "Dynamical Correlations in the Spin-1/2 Heisenberg XXZ Chain in a staggered Field"  
I. Kuzmenko and F.H.L. Essler  
Phys. Rev. B **79**, 024402 (2009).
69. "Finite Temperature Dynamical Structure Factor of Alternating Heisenberg Chains"  
A.J.A. James, F.H.L. Essler and R.M. Konik  
Phys. Rev. B **78**, 094411 (2008).
68. "Modelling Magnetic Fluctuations in the Stripe Ordered State"  
R.M. Konik, F.H.L. Essler and A.M. Tsvelik  
Phys. Rev. **B78**, 214509 (2008).
67. "Slowest relaxation mode of the partially asymmetric exclusion process with open boundaries"  
J. deGier and F.H.L. Essler  
J. Phys. **A41**, 485002 (2008).
66. "Local density of states of 1D Mott insulators and CDW states with a boundary"  
D. Schuricht, F.H.L. Essler, A. Jaefari and E. Fradkin  
Phys. Rev. Lett. **101**, 086403 (2008).
65. "A test of the g-ology model for one-dimensional interacting Fermi systems"  
A.V. Chubukov, D.L. Maslov and F.H.L. Essler  
Phys. Rev. **B77**, 161102(R) (2008).
64. "Finite Temperature Lineshapes in Gapped Quantum Spin Chains"  
F.H.L. Essler and R.M. Konik  
Phys. Rev. **B78**, 100403(R) (2008).
63. "Dynamical Response Functions in the Quantum Ising Chain with a Boundary"  
D. Schuricht and F.H.L. Essler  
J. Stat. Mech.: Theor. Exp. P11004 (2007).
62. "Luttinger liquid coupled to quantum spins: Flow equation approach to the Kondo necklace model"  
F.H.L. Essler, T. Kuzmenko and I.A. Zaliznyak  
Phys. Rev. **B76**, 115108 (2007).
61. "Effective Forces Induced by Fluctuating Interface: Exact Results"  
D.B. Abraham, F.H.L. Essler and A. Maciolek  
Phys. Rev. Lett. **98**, 170602 (2007).
60. "Dynamical Spin Response of Doped Two-Leg Hubbard-like Ladders"  
F.H.L. Essler and R.M. Konik  
Phys. Rev. **B75**, 144403 (2007).
59. "Exact Spectral Gaps of the Asymmetric Exclusion Process with Open Boundaries"  
J. deGier and F.H.L. Essler  
J. Stat. Mech.: Theor. Exp. P12011 (2006).

58. “Thermodynamics of the one-dimensional Hubbard model in the spin-disordered regime”  
S. Ejima, F.H.L. Essler and F. Gebhard,  
J. Phys. **A39**, 4845 (2006).
57. “Quantum phase transition in the one-dimensional extended Peierls-Hubbard model”  
H. Benthien, F.H.L. Essler and A. Grage,  
Phys. Rev. **B73**, 085105 (2006).
56. “Bethe Ansatz Solution of the Partially Asymmetric Exclusion Process”  
J. deGier and F.H.L. Essler,  
Phys. Rev. Lett. **95**, 240601 (2005).
55. “Spin Dynamics of the Quasi Two Dimensional Spin-1/2 Quantum Magnet  $\text{Cs}_2\text{CuCl}_4$ ”  
M.J. Veillette, A.J.A. James and F.H.L. Essler,  
Phys. Rev. **B72**, 134429 (2005).
54. “Continuum Limit of the Integrable  $\text{sl}(2/1) \ 3 - \bar{3}$  Superspin Chain”  
F.H.L. Essler, H. Frahm and H. Saleur,  
Nucl. Phys. **B712**, 513 (2005).
53. “A Strange Metal with a Small Fermi Surface and Strong Collective Excitations”  
F.H.L. Essler and A.M. Tsvelik,  
Phys. Rev. **B71**, 195116 (2005).
52. “Itineracy Effects on Spin Correlations in 1D Mott Insulators”  
M.J. Bhaseen, F.H.L. Essler and A. Grage,  
Phys. Rev. **B71**, 020405(R)
51. “Haldane-gap Chains in a Magnetic Field”,  
F.H.L. Essler and I. Affleck,  
J. Stat. Mech.: Theor. Exp. P12006 (2004).
50. “Resonant Inelastic X-Ray Scattering Study of Holon-Antiholon Continuum in  $\text{SrCuO}_2$ ”,  
Y.-J. Kim, J.P. Hill, H. Benthien, F.H.L. Essler, E. Jeckelmann et. al.  
Phys. Rev. Lett. **92**, 134402 (2004).
49. “Dynamical Structure Factor of the anisotropic Heisenberg chain in a transverse field”,  
J.-S. Caux, F.H.L. Essler and U. Löw,  
Phys. Rev. **B68**, 134431 (2003).
48. “Dynamical Structure factor in Cu Benzoate and other spin-1/2 antiferromagnetic chains”,  
F.H.L. Essler, A. Furusaki and T. Hikihara,  
Phys. Rev. **B68**, 064410 (2003).
47. “Polarization Dependence of spin excitations in  $\text{BaCu}_2\text{Si}_2\text{O}_7$ ”,  
A. Zheludev, S. Raymond, L.-P. Regnault, F.H.L. Essler, K. Kakurai, T. Matsuda and K. Uchinokura,  
Phys. Rev. **B67**, 134406 (2003).
46. “Finite Temperature Spectral Function of Mott Insulators and Charge Density Wave States”,  
F. H. L. Essler and A.M. Tsvelik,  
Phys. Rev. Lett. **90**, 126401 (2003).
45. “Dynamical density correlation function of 1D Mott insulators in a magnetic field”,  
D. Controzzi and F.H.L. Essler,  
Phys. Rev. **B66**, 165112 (2002).
44. “Quantum criticalities in a 2-leg antiferromagnetic  $s=1/2$  ladder induced by a staggered magnetic field”,  
Y.-J. Wang, F.H.L. Essler, M. Fabrizio and A.A. Nersesyan ,  
Phys. Rev. **B66**, 024412 (2002).
43. “Weakly coupled one dimensional Mott insulators”,  
F. H. L. Essler and A.M. Tsvelik,  
Phys. Rev. **B65**, 115117 (2002).



42. “Spectral function of a quarter-filled one-dimensional CDW insulator”  
F. H. L. Essler and A.M. Tsvelik,  
*Phys. Rev. Lett.* **88**, 096403 (2002).
41. “Excitons in one dimensional Mott insulators”  
F. H. L. Essler, F. Gebhard and E. Jeckelmann,  
*Phys. Rev.* **B64**, 5119 (2001).
40. “Finite temperature dynamical magnetic susceptibility of quasi one dimensional, frustrated Heisenberg spin-1/2 antiferromagnets”,  
M. Bocquet, F.H.L. Essler, A.M. Tsvelik and A.O. Gogolin  
*Phys. Rev.* **B64**, 4425 (2001).
39. “Optical conductivity of one-dimensional Mott insulators”  
D. Controzzi, F.H.L. Essler and A.M. Tsvelik,  
*Phys. Rev. Lett.* **86**, 680 (2001).
38. “Optical conductivity of the half-filled Hubbard chain”,  
E. Jeckelmann, F. Gebhard and F. H. L. Essler,  
*Phys. Rev. Lett.* **85**, 3910 (2000).
37. “On the three-particle scattering continuum in quasi one dimensional integer spin Heisenberg magnets”,  
F.H.L. Essler,  
*Phys. Rev.* **B62**, 3264 (2000).
36. “A numerical method for detecting incommensurate correlations in the Heisenberg zigzag ladder”  
A. A. Aligia, C. D. Batista and F. H. L. Essler,  
*Phys. Rev.* **B62**, 3259 (2000).
35. “Exact solution of a partially asymmetric exclusion model using a deformed oscillator algebra”,  
R.A. Blythe, M.R. Evans, F. Colaiori and F.H.L. Essler,  
*J. Phys.* **A33**, 2313 (2000).
34. “The fate of spinons in spontaneously dimerized spin-1/2 ladders”,  
D. Allen, F.H.L. Essler and A.A. Nersesyan,  
*Phys. Rev.* **B61**, 8871 (2000).
33. “Thermodynamics and Excitations of the one-dimensional Hubbard Model”,  
T. Deguchi, F.H.L. Essler, F. Göhmann, V.E. Korepin, A. Klümper and K. Kusakabe,  
*Phys. Reports* **331** 5, 197 (2000).
32. “Density correlations in the half-filled Hubbard model”  
F.H.L. Essler and H. Frahm,  
*Phys. Rev.* **B60**, 8540 (1999).
31. “Roughening transition in an exactly solvable terrace-ledge-kink model”  
D.B. Abraham, F.H.L. Essler and F.T. Latrémoière,  
*Nucl. Phys.* **B556**, 411 (1999).
30. “Sine-Gordon low-energy effective theory for Copper Benzoate”  
F.H.L. Essler,  
*Phys. Rev.* **B59**, 14376 (1999).
29. “Formfactors in the half-filled Hubbard model”  
F.H.L. Essler and V.E. Korepin,  
*Phys. Rev.* **B59**, 1734 (1999).
28. “Incommensurate spin correlations in Heisenberg spin-1/2 zig-zag ladders”  
A. A. Nersesyan, A. O. Gogolin and F. H. L. Essler,  
*Phys. Rev. Lett.* **81** (1998) 910.
27. “Temperature Corrections to Conformal Field Theory”  
F.H.L. Essler, V.E. Korepin and F.T. Latrémoière  
*Europ. Phys. Jour.* **B5**, 559 (1998).

26. “Dynamical Magnetic Susceptibilities in Cu Benzoate”  
F.H.L. Essler and A.M. Tsvelik,  
*Phys. Rev.* **B57** (1998) 10592.
25. “Quasi-1D spin-1/2 Heisenberg magnets in their ordered phase: correlation functions”  
F.H.L. Essler, A.M. Tsvelik and G. Delfino,  
*Phys. Rev.* **B56** (1997) 11001.
24. “X-ray edge singularity in integrable models of correlated electrons”  
F.H.L. Essler and H. Frahm, *Phys. Rev.* **B56** (1997) 6631.
23. “Exact Solution of a  $t$ - $J$  Chain with Impurity”  
G. Bedürftig, F.H.L. Essler and H. Frahm,  
*Nucl. Phys.* **B489** (1997) 697.
22. “Determinant Representation for a Quantum Correlation Function of the Lattice Sine-Gordon Model”  
F.H.L. Essler, H. Frahm, A.R. Its and V.E. Korepin,  
*J. Physics* **A30** (1997) 219.
21. “Integrable Impurity in the Supersymmetric  $t$ - $J$  Model”  
G. Bedürftig, F.H.L. Essler and H. Frahm,  
*Phys. Rev. Lett.* **77** (1996) 5098.
20. “The Supersymmetric  $t$ - $J$  Model with a Boundary”  
F.H.L. Essler,  
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