H. SALEUR: CURRICULUM VITAE

Biography

Address

Service de Physique Théorique
Orme des Merisiers, CEN Saclay
91191 Gif Sur Yvette Cedex (France)

and

Physics and Astronomy Department
University of Southern California
Los Angeles CA 90089-0484 (USA)
(Currently on leave)

Emails   saleur@physics.usc.edu; hubert.saleur@cea.fr

Date of Birth   December 28, 1960

Place of birth   Aix en Provence, France

Citizenship   Double, French and US

Education

Sept. '81 - Sept. '85, Student of Ecole Normale Supérieure (Paris, France),
Sept. '87, Ph.D., University of Paris 6

Positions

Sept. '86 - Sept. '90 Service de Physique Théorique (Saclay, France),
CNRS Research Associate
Jan. '91 - Dec. '91 Yale University
Assistant Professor
Jan. '92 - Dec. '92 Yale University
Associate Professor
After Jan. '93, University of Southern California,
Associate Professor
After Jan. '96, University of Southern California,
Professor of Physics and Mathematics
Sep. '99 - June '02 Caltech - USC Center for Theoretical Physics, Member
After Jan. '04, Institut de Physique Théorique (Saclay, France)
International Director of Research

Honors

Oct. '87 Recipient (with B. Duplantier) of the *Doisteau Blutel Prize* of the French Academy of Sciences
Oct. '87 Recipient of the *Bronze Medal* form the CNRS (France)
Sept. '91 Recipient of a David and Lucile Packard Fellowship
July '93 Recipient of the National Young Investigator Award (NSF)
April '01 Recipient of the Humboldt Senior Research Award (Germany)

June '11 Recipient of the *Silver Medal* from the CNRS (France)

Sept.'15 Recipient of an ERC (European Research Council) Advanced Research Grant

Sept.'19 Recipient of the *Jean Ricard Grand Prize* from the French Physical Society (SFP)

General Interests

Quantum field theories,

Their applications in condensed matter physics and statistical mechanics,

And their relations with mathematics.

Accepted invitations to speak at Conferences, Workshops and Schools

"Conformal Invariance and String Theory", Brasov (Romania), September 1987

"Conformal Field Theories and Related Topics", Annecy (France), March 1988

"Conformal Field Theory and Strings", Abingdon (England), May 1988

"Common Trends in Condensed Matter and Particle Physics", Cargese (France), May 1988

"Workshop on Conformal Field Theory and Strings", Zurich (Switzerland), May 1989

"Workshop on Conformal Field Theory and Strings", Copenhagen (Denmark), May 1989

"Interface between Quantum Field Theory and Condensed Matter", Trieste (Italy), June 1989

"Knots, Topology and Quantum Field Theory", Firenze (Italy), June 1989

"8th Symposium on Theoretical Physics: Conformal Field Theory and Statistical Mechanics", Sokcho (Korea), July 1989

"Recent Developments in Conformal Field Theories", Trieste (Italy), October 1989

"Trieste School on String Theory and Quantum Gravity", Trieste (Italy), May 1990

"Conformal Field Theory and Related Topics', ITP Santa Barbara August-December 1990

"Trieste Conference on Quantum Field Theory and Condensed Matter Physics", Trieste (Italy), May 1991

"20th International Conference on Differential Geometric Methods in Theoretical Physics", New York, June 1991

"Quantum Groups in Field Theory and Superconductivity", Como (Italy), June 1991

"Conformal Field Theory and Related Topics", Durham (England), July 1991

"Infinite Analysis", Kyoto (Japan), August 1991

"70th Statistical Mechanics Meeting" Rutgers, May 1992 (Principal Speaker)

"Integrable Quantum Field Theories", Como (Italy), September 1992

"Annual meeting of the Canadian Mathematical Society", Montreal (Canada), December 1992 (Principal Speaker)

"Strings 93", Berkeley, May 1993

"Summer School on High Energy Physics and Cosmology", Trieste (Italy), July 1993

"Recent Progress in Quantum Integrable Systems", Aspen, August 1993

"Western regional meeting of the American Mathematical Society", Claremont, November 1993

"Statistical mechanics and quantum field theory", Los Angeles, May 1994

"Topology, Strings and Integrable Models", Paris (France), July 1994

"Workshop in theoretical and mathematical physics", Quebec (Canada), June 1995

"Low dimensional applications of quantum field theory", Cargese (France), July 1995

"Statistical mechanics and quantum field theory", Trieste (Italy), March 1996

"The mathematical beauty of physics", Paris (France) June 1996

"76th Statistical Mechanics Meeting", Rutgers, December 1996 (Principal Speaker)

"Quantum field theory in low dimensions, from condensed matter to particle physics", ITP, Santa Barbara, February–July 1997

"Western regional meeting of the American Mathematical Society", Davis, April 1998

"Spin boson systems in chemistry and physics", to be held in Freiburg (Germany), May 1998

"Topological aspects of low dimensional systems", Les Houches (France), July 1998

"Mathematical physics of polymers and percolation", Toronto (Canada), August 1998

"APCTP Symposium", Seoul (Korea), October 1998

"Trimestre fermions fortement correles", IHP Paris (France), Spring 1999

"*Mathematical aspects of transport in correlated systems*", Ascona (Switzerland), July 1999

"*Methods of quantum field theory in solid state physics*", Aspen, August 1999

"*New methods in the study of strongly correlated electron systems*", Cambridge (England), April 2000

"*Quantum integrability 2000*", Montreal (Canada), Spring 2000.

"*Groupement de recherche sur théories des champs et phénomènes non perturbatifs*", Lyon (France), May 2000.

"*Statistical Field Theories*", Como (Italy), Spring 2001

"*Amsterdam Workshop on Flux, Charge, Topology and Statistics*", Amsterdam (Netherlands), Spring 2001

"*Summer School on low dimensional quantum systems*", Trieste, Summer 2001

"24th *International Colloquium on Theoretical Methods in Physics*", Paris (France), Summer 2002.

"*TH 2002*", Paris (France), Summer 2002.

"*Amsterdam Workshop on Flux, Charge, Topology and Statistics*", Amsterdam (Netherlands), Spring 2003.

"*Integrable Models and Applications*", Firenze (Italy), Fall 2003.

"*Dynamics of Interacting Electrons in Quantum Wires* ", Miraflores (Spain), Fall 2003.

"*String Theory in Curved Backgrounds and Boundary Conformal Field Theory*", Vienna (Austria), Spring 2004.

"*Modern Problems in Theoretical Physics and Integrable Systems*", Montpellier (France), Spring 2004.

"*Quantum Hall effect*", Capri (Italy), Summer 2004.

"*Integrable Models and Applications*", Bologna (Italy) Fall 2004.

" *Amsterdam Summer Workshop on Low-D Quantum Condensed Matter*", Amsterdam (Netherlands), Summer 2005.

"*Preuss Seminar on Macromolecular folding*", USC, Summer 2005.

"*23d International Conference of Differential Geometrical Methods in Theoretical Physics*", Tianjin (China), Summer 2005

"*First INSTANS Summer Conference*", Como (Italy), Spring 2006

"*International Congress of Mathematics*", Madrid (Spain), Summer 2006

"*EUCLID Conference on Integrability and Applications*", Lyon (France), Fall 2006

"*Solvay Conference: 75 years of the Bethe ansatz*", Bruxelles (Belgium), Fall 2006

"*Topics in representation theory*", London (England), Fall 2006.

" *Random shapes, representation theory and conformal field theory*", Los Angeles, Spring 2007.

"*Integrability in Gauge and String Theory*", Saclay (France), Spring 2007.

"*Low D Quantum Condensed Matter*", Amsterdam (Netherlands), Summer 2007.

"*INSTANS Summer School 2007*", Oxford (UK), Summer 2007

"*Nanoscopic Transport*", Freiburg (Germany), Fall 2007.

"*Fields, Lattices and Condensed Matter*, Oxford (UK) Fall 2007

"*15th Irish quantum field theory meeting*", Maynooth (Ireland) Spring 2008

"*Enrage School on Growth and Shapes*", Paris (France) Spring 2008

"*Puzzles of Growth*", Paris (France) Spring 2008

"*Exact methods in low dimensional statistical physics and quantum computing*", Les Houches (France) Summer 2008.

"*Applied 2d sigma models*", Hamburg (Germany) Fall 2008

"*Quantum coherence and many-body correlations: from mesoscopic to macroscopic scales*", Saclay (France) Fall 2008

"*Integrability in gauge and string theory*", Potsdam (Germany) Spring 2009

"Workshop on Logarithmic conformal field theory", Zürich (Switzerland) Spring 2009

"Emergent Quantum Phenomena from the Nano- to the Macro- World" , Cargese (France) Summer 2009

"Facets of integrability", Saclay (France) Fall 2009

"Time dependent dynamics and non equilibrium quantum systems", Budapest (Hungary) Spring 2010

"Quantum information concepts for condensed matter problems", Dresden (Germany) Spring 2010

"Quantum engineering of states and devices", Innsbruck (Austria) Spring 2010

"Quantum Theories and symmetries", Lexington (Kentucky) Summer 2010

"Integrability and its breaking in strongly correlated and disordered systems", Trieste (Italy) Spring 2011

"Cargese-Luminy Physics Mathematics Summer Institute", Marseille and Cargese (France) Summer 2011

"Conformal field theory, automorphic forms and related topics", Heidelberg (Germany) Summer 2011

"Sasha Gogolin memorial meeting on many body theory", Trieste (Italy) Fall 2011

"Conformal Invariance, Discrete Holomorphicity and Integrability", Helsinki (Finland), Spring 2012

"International Congress on Mathematical Physics", Aalborg (Denmark), Summer 2012

"Strongly interacting quantum systems out of equilibrium", Les Houches (France), Summer 2012

"Low D quantum condensed matter 2013", Amsterdam (Netherlands), Summer 2013

"Euler symposium on theoretical and mathematical physics", St Petersburg (Russia), Summer 2013

"Entanglement entropy of many body quantum systems", London (UK), Spring 2014

"Strings, Matrices and Integrability", Paris (France), Summer 2014

"Quantum Engineering", Stockholm (Sweden) , Summer 2014

"Symmetries and universality in mesoscopic systems", Koeln (Germany), Spring 2015

"The mathematics of conformal field theory", Canberra (Australia), Summer 2015

"Baxter 2015: Exactly solved models and beyond", Cairns (Australia), Summer 2015

"Non-equilibrium dynamics of stochastic and quantum integrable systems", Santa-Barbara (USA), Spring 2016

"Representation theory and physics", Leeds (UK), Summer 2016

"Entanglement and non equilibrium physics of pure and disordered systems", Trieste (Italy), Summer 2016

"Random geometry and physics", Paris (France), Fall 2016

"Subfactors, K theory and conformal field theory", Cambridge (UK), Spring 2017

"Condensed matter in the city", London (UK), Summer 2017

"Wonders of broken integrability", Stonybrook (US), Fall 2017

"Correlation functions in quantum integrable systems and beyond", Lyon (France), Fall 2017

"Entanglement in quantum systems", Florence (Italy), Spring 2018

"Algebraic methods in mathematical physics", Montreal (Canada), Summer 2018

"Recent advances in quantum integrable systems", Annecy (France), Fall 2018

"Curiosity-Driven Physics: From Algebras to Quantum Chains and Statistical Mechanics", Trieste (Italy), Spring 2019

"Field Theory in Condensed Matter: A Symposium in honor of Nick Read", New Haven (USA), Spring 2019

"In and around topological physics", Kuangou (Chine), Summer 2019

"The wonders of theoretical physics", Trieste (Italy), Fall 2019

"Challenges in Integrability", Wuhan (Chine), Spring 2020 (cancelled)

"HMI Workshop on Integrability", Dublin (Ireland), Spring 2020 (cancelled)

"Boundary Quantum Field Theory", Mainz (Germany), Summer 2020 (cancelled)

"Integrability in Lower Dimensional AdS/CFT", Dublin (Ireland), Summer 2021

"Integrability, Dualities and Deformations", Santiago (Spain), Summer 2021

"Probability, integrability, and conformal invariance", Stonybrook (USA), Fall 2021
"Quantum Field Theory at the Boundary", Mainz (Germany), Fall 2021

Conference organizer, coeditor of Proceedings

"Statistical mechanics and quantum field theory", USC, Los Angeles, May 1994

"Strings 95", USC, Los Angeles, March 1995

"Recent developments in statistical mechanics and quantum field theory", Trieste (Italy), April 1995

"Summer School on low dimensional quantum systems", Trieste, Summer 2001

"Applications of conformal field theory", IPAM, Los Angeles, Fall 2001

"Quantum field theory then and now: a tribute to C. Itzykson", Saclay (France), Spring 2005.

"Statistical field theory of quantum devices", Perugia (Italy), Summer 2007.

"Exact results in low dimensional quantum systems", Florence (Italy), Fall 2008

"Capri School on transport in nanostructures", Capri (Italy), Spring 2009

"International Congress of Mathematical Physics", Quantum Field Theory Session, Montreal (Canada), Summer 2018

"Quantum Theory and Symmetry XI, July 2019", Quantum Field Theory Session, Montreal (Canada), Summer 2019

Workshop organizer

"Quantum field theory in low dimensions, from condensed matter to particle physics", ITP, Santa Barbara, February–July 1997

"Quantum integrability 2000", Montreal (Canada), January–March 2000.

"Conformal field Theory", IPAM (Los Angeles), September–December 2001.

"Low dimensional quantum field theory and applications", Galileo Institute, Florence (Italy), Fall 2008.

"Advanced Conformal Field Theory and Applications", IHP Centre Emile Borel, Paris (France), Fall 2011

"Strongly interacting quantum systems out of equilibrium", Les Houches (France), Summer 2012

"Exact methods in low dimensional statistical physics", Cargese (France), Summer 2017

Other present and past experience

Associate Editor of "Journal of Knot Theory and its Ramifications", World Scientific

Managing Editor of "Nuclear Physics B (FS)", North Holland

Associate Editor of "Journal of Physics A", Institute of Physics Publishing

Associate Editor of "Topological order", Versita

Associate Editor of "SIGMA", Symmetry, Integrability and Geometry: Methods and Applications (https://www.emis.de/journals/SIGMA/)

Associate Editor of Sci|Post (https://scipost.org)

Coeditor of the reprint volume "Conformal invariance and applications to statistical mechanics", World Scientific 1988

Referee for Phys. Rev. B, E, Phys. Rev. Lett., Phys. Lett. A, Phys. Lett. B, Nucl. Phys. B, J. Phys. A, Journal de Physique, European Letters in Physics, Comm. Math. Phys., Lett. Math. Phys., J. Geog. Res. J. of Math. Phys., J. of Knot Theory

Publications (Research Papers only)

(References [26], [33], [35]. [59] are reviews or lecture notes containing also original research work not published elsewhere.)

[1] H.Saleur and B.Derrida, "A combination of Monte carlo and transfer matrix methods to study 2d and 3d percolation", *J.Physique* **46** (1985), 1043–1047

[2] H.Saleur, "F model type phase transition in the 2d Flory model of polymer melting",*J.Phys.***A19** (1986), 2409–2423

[3] B.Derrida and H.Saleur, "Collapse of two dimensional linear polymers:a transfer matrix calculation of the exponent ν_t", *J.Phys.***A18** (1985), L1075–L1079

[4] H.Saleur and B.Derrida, "Transfer matrix calculation of the exponent γ for two dimensional self avoiding walks", *J.Stat.Phys.* **44** (1986), 225–235

[5] H.Saleur, "Collapse of two dimensional linear polymers", *J.Stat.Phys.* **45** (1986), 419–438

[6] H.Saleur, "Conformal invariance for polymers and percolation", *J.Phys.* **A20** (1987), 455–470

[7] C.Itzykson, H.Saleur and J.B.Zuber, "Conformal invariance for non unitary 2d models", *Europhys.Lett.* **2** (1986), 91–96

[8] J.Lebowitz, H.Saleur, "Percolation in strongly correlated systems", *Physica* **A138** (1986), 194–205

[9] H.Saleur, "New exact critical exponents for 2d self avoiding walks", *J.Phys.***A19** (1986), L807–L810

[10] B.Duplantier and H.Saleur, "Exact surface and wedge exponents for 2d self avoiding walks", *Phys.Rev. Lett.* **57** (1987), 3179

[11] H.Saleur, "Magnetic properties of the 2d $n = 0$ vector model", *Phys.Rev.* **B35** (1987), 3657–3660

[12] H.Saleur and B.Duplantier, "Exact determination of the percolation hull exponent in 2d", *Phys. Rev. Lett.* **58** (1987), 2325–2328

[13] P.Di Francesco, H.Saleur and J.B.Zuber, "Modular invariance in non minimal 2d conformal theories", *Nucl.Phys.* **B285** (1987), 454–480

[14] H.Saleur and C.Itzykson, "Two dimensional field theories close to criticality", *J.Stat.Phys.* **48** (1987), 449–475

[15] P.Di Francesco, H.Saleur and J.B.Zuber, "Relations between the Coulomb gas picture and conformal invariance of 2d critical models", *J.Stat.Phys.* **49** (1987), 57–79

[16] H.Saleur, "Partition functions of the 2d Ashkin Teller model on the critical line", *J.Phys.* **A20** (1987), L1127–L133

[17] B.Duplantier and H.Saleur, "Exact critical properties of 2d dense self avoiding walks", *Nucl.Phys.* **B290** (1987), 291–326

[18] B.Duplantier and H.Saleur, "Exact tricritical exponents for polymers at the theta point in 2d", *Phys. Rev. Lett.* **59** (1987), 539–542

[19] P.Di Francesco, H.Saleur and J.B.Zuber, "Correlations functions of the critical Ising model on a torus", *Europhys.Lett.* **5** (1988), 95–100

[20] P.Di Francesco, H.Saleur and J.B.Zuber, "Critical Ising correlation functions in the plane and on the torus", *Nucl.Phys.* **B290** (1987), 527–581

[21] H.Saleur, "Correlation functions of the critical Ashkin Teller model", *J.Stat.Phys.* **50** (1988), 475–508

[22] B.Duplantier and H.Saleur, "Winding angle distribution for 2d self avoiding walks from conformal invariance", *Phys.Rev.Lett.* **60** (1988), 2343–2346

[23] P.Di Francesco, H.Saleur and J.B.Zuber, "Generalized Coulomb gas formalism for 2d critical models based on $SU(2)$ coset construction", *Nucl.Phys.* **B300** (1988), 393–432

[24] H.Saleur and M.Bauer, "On some relations between local height probabilities and conformal invariance", *Nucl.Phys.* **B320** (1989), 591–624

[25] H.Saleur, "Off critical integrable vertex models and conformal theories in finite geometries", *J.Phys.* **A22** (1988), L41–L48

[26] V.Pasquier and H.Saleur, "Symmetry of the XXZ chain and quantum $SU(2)$", *in Fields, Strings and Critical Phenomena, Ecole d'ete de Physique Theorique, Session XLIX, Les Houches*(1988)

[27] B.Duplantier and H.Saleur, "Stability of the polymer theta point in 2d", *Phys.Rev.Lett.* **62** (1989), 1368–1371

[28] M.Henkel and H.Saleur, "The 2d Ising model in a magnetic field: a numerical check of Zamolodchikov's conjecture", *J.Phys.* **A22** (1989), L513–L518

[29] J.L.Cardy, H.Saleur, "Universal distance ratios for 2d polymers", *J.Phys.* **A22** (1989), L601–L604

[30] V.Pasquier and H.Saleur, "Common structures between finite systems and conformal field theories through quantum groups", *Nucl.Phys.* **B330** (1990), 523–556

[31] B.Duplantier and H.Saleur, "Exact fractal dimension of 2d Ising clusters", *Phys.Rev.Lett.* **63** (1989), 2536

[32] M.Henkel and H.Saleur, "Remarks on the mass spectrum of non critical coset models from Toda theories", *J.Phys.* **A23** (1990), 791–808

[33] H.Saleur, "Virasoro and Temperley Lieb algebras", *in Knots, Topology and Quantum Field Theory, Firenze* (1989)

[34] H.Saleur, "Quantum osp(1/2) and solutions of the graded Yang Baxter equation", *Nucl.Phys.* **B336** (1990), 363–376

[35] H.Saleur, "Symmetries of the XX chain and applications", *in Trieste conference on Recent developments in Conformal Field Theories* (1989)

[36] H.Saleur, "Zeroes of chromatic polynomials:a new approach to Beraha conjecture using quantum groups", *Comm. Math. Phys.* **132** (1990), 657 – 679

[37] H.Saleur and D.Altschuler, "Level rank duality in quantum groups", *Nucl.Phys.* **B354** (1991), 579–613

[38] D.Altschuler, M.Bauer and H.Saleur, "Level rank duality in non unitary coset theories", *J.Phys.* **A23** (1990), L789–L793

[39] L.Kauffman and H.Saleur, "Free fermions and the Conway Alexander polynomial", *Comm.Math.Phys.* **141** (1991), 293–327

[40] H.Saleur, "The antiferromagnetic Potts model in two dimensions: Berker Kadanoff phases, antiferromagnetic transition and the role of Beraha numbers", *Nucl.Phys.* **B 360** (1991), 219 – 263

[41] H.Saleur, "$c = 1 - 6(n-1)^2/n$ theories coupled to gravity: their possible lattice models realizations", *J.Mod.Phys.* **A6** (1991), 1709–1719

[42] L.Rozansky, H.Saleur, "Quantum Field Theory for the Multivariable Alexander Conway Polynomial", *Nucl.Phys.* **B376** (1991), 461–509

[43] L.Kauffman, H.Saleur, "Free Fermions and Link Invariants", *Int. J. Mod. Phys.* (1992), 493–532 (1991)

[44] F.Jaeger, L.Kauffman and H.Saleur, "The Conway polynomial in R^3 and in thickened surfaces:a new determinant formulation", to appear in *J.Comb.Th.* **61** (1994), 237–259

[45] L.Kauffman and H.Saleur, "An algebraic approach to the planar colouring problem", *Comm. Math. Phys.* **152** (1993), 565–590

[46] H.Saleur, "Polymers and percolation in two dimensions and twisted N=2 supersymmetry", *Nucl. Phys.* **B382** (1992), 486–531

[47] H.Saleur, "Geometrical lattice models for N=2 supersymmetric theories in two dimensions", *Nucl. Phys.* **B382** (1992), 532–560

[48] L.Rozansky, H.Saleur, "S and T matrices for the $U(1,1)$ WZW model: application to surgery and three manifold invariants based on the Alexander Conway polynomial", *Nucl. Phys.* **B389** (1993), 365–423

[49] P.Fendley, H.Saleur, "N=2 Supersymmetry, Painleve III and Exact Scaling Functions in 2D Polymers", *Nucl. Phys.* **B388** (1993), 609–626

[50] L.Rozansky, H.Saleur, "Reidemeister Torsion, the Alexander Polynomial and $U(1,1)$ Chern Simons Theory", *J.Geom.Phys.* **13** (1994), 105–123

[51] P.Martin, H.Saleur, "On an algebraic approach to non planar statistical mechanics" , *Comm.Math.Phys.* **158** (1993) 155-190

[52] W.M.Koo, H.Saleur, "Fused Potts models" *Int.Mod.J.Phys.* **A8** (1993), 5165–5233

[53] P.Martin, H.Saleur, "Algebras in higher dimensional statistical mechanics - the exceptional partition algebra" *Lett.Math.Phys.* **30** (1994) 179–185

[54] P.Martin, H.Saleur, "The blob algebra and the periodic Temperley Lieb algebra", *Lett.Math.Phys.* **30** (1994) 189–206

[55] P.Fendley, H.Saleur, Al.B.Zamolodchikov, "Massless flows I: the sine-Gordon and $O(n)$ models", *Int.J. Mod. Phys.* **A32** (1993), 5717–5750

[56] P.Fendley, H.Saleur, Al.B.Zamolodchikov, "Massless flows II: the exact S matrix approach", *Int.J. Mod. Phys.* **A32** (1993), 5717–5750

[57] N.Yu.Reshetikhin, H.Saleur, "Lattice regularization of massive and massless integrable field theories", *Nucl. Phys.* **B419** (1994) 507–528

[58] H.Saleur, "The winding angle distribution for Brownian and self avoiding walks revisited", *Phys. Rev.* **E50** (1994) 1123–1128

[59] P.Fendley, H.Saleur, "Massless integrable quantum field theories and massless scattering in $1 + 1$ dimensions", Proceedings on the Trisete Summer School in High Energy Physics and Cosmology, (1993), Gava et al. Eds., World Scientific

[60] W.M.Koo, H.Saleur, "Representations of the Virasoro algebra from lattice models", *Nucl. Phys.* **B246** (1994), 459–504.

[61] P.Fendley, H.Saleur, "Deriving boundary S-matrices", hep-th/9402045, *Nucl. Phys.* **B428** (1994), 681–693.

[62] H.Saleur, S.Skorik, "Solution of the Thirring model with imaginary mass and massless scattering", hep-th/9403022, *Phys. Lett.* **B336** (1994) 205–212

[63] P.Fendley, H.Saleur, "Exact theory of polymer adsorption in analogy with the Kondo problem", cond-mat/9403095, *J. Phys.* **A27** (1994) L789–L796

[64] P.Fendley, H.Saleur, N.P.Warner, "Exact solution of a massless scalar field with a relevant boundary interaction", hep-th/9406125, *Nucl. Phys.* **B430** (1994), 577–596.

[65] H.Saleur, S.Skorik, N.P.Warner, "The boundary sine-gordon theory: classical and semi-classical analysis", hep-th/9408004, *Nucl. Phys.* **B441** (1995), 421–436

[66] P.Fendley, A.Ludwig, H.Saleur, "Exact Conductance through Point Contacts in the $\nu = 1/3$ Fractional Quantum Hall Effect", cond-mat/9408068, *Phys. Rev. Lett.* **74** (1995), 3005-3008

[67] P.Fendley, F.Lesage, H.Saleur, "Solving the 1d plasmas and 2d boundary problems using Jack polynomials and functional relations", cond-mat/9409176, *J. Stat. Phys.* **79** (1995), 799–819

[68] S. Skorik, H. Saleur, "Boundary bound states and boundary bootstrap in the sine-Gordon model with Dirichlet boundary conditions", hep-th/9502011, *J. Phys.* **A28** (1995), 6605–6622

[69] A. LeClair, G. Mussardo, H. Saleur, S. Skorik, "Boundary energy and boundary states in integrable quantum field theories", hep-th/9503227, *Nucl. Phys.* **B453** (1995), 581–618

[70] P. Fendley, A. Ludwig, H. Saleur, "Exact non-equilibrium transport through point contacts in quantum wires and fractional quantum Hall devices", cond-mat/9503172, *Phys. Rev.* **B52** (1995), 8934–8950

[71] H. Saleur, D. Sornette, "Complex exponents and log-periodic corrections in frustrated systems", *J. Physique* **I6** (1996), 327–355

[72] P. Fendley, A. Ludwig, H. Saleur, "Exact zero temperature DC shot noise in Luttinger liquids and quantum Hall devices", cond-mat/9505031, *Phys. Rev. Lett.* **75** (1995), 2196–2199

[73] D. Sornette, A. Johansen, A. Arnéodo, H. Saleur, "A new complex fractal dimension describes the hierarchical internal structure of DLA clusters", *Phys. Rev. Lett.* **76** (1996), 251–254

[74] P. Fendley, H. Saleur, "Exact perturbative solution of the Kondo problem", cond-mat/9506104, *Phys. Rev. Lett.* **75** (1995), 4492–4495

[75] P. Fendley, F. Lesage, H. Saleur, "A unified framework for the Kondo problem and for an impurity in a Luttinger liquid", cond-mat/9510055, *J. Stat. Phys.* **85** (1996), 211–249

[76] P. Fendley, H. Saleur, "Non-equilibrium DC noise in Luttinger liquids with impurity", cond-mat/960117, *Phys. Rev.* **B54** (1996), 10845–10854

[77] F. Lesage, H. Saleur, S. Skorik, "Time correlations in 1D quantum impurity problems", cond-mat /9512087, *Phys. Rev. Lett.* **76** (1996), 3388–3391

[78] F. Lesage, H. Saleur, S. Skorik, "Form factors approach to current correlations in one dimensional systems with impurities", cond-mat/96003043, *Nucl. Phys.* **B474** (1996), 602–640

[79] A. Leclair, F. Lesage, S. Sachdev, H. Saleur, "Finite temperature correlations in the one dimensional quantum Ising model", cond-mat/9606104, *Nucl. Phys.* **B482** (1996), 579–612

[80] A. Leclair, F. Lesage, H. Saleur, "Exact Friedel oscillations in the $g = 1/2$ Luttinger liquid", cond-mat/9606124, *Phys. Rev.* **B 54** (1996), 13597–13603

[81] F. Lesage, H. Saleur, "Form-factors computation of Friedel oscillations in Luttinger liquids", cond-mat/9608112, *J. Phys.* **A30** (1997), L457–L463

[82] F. Lesage, H. Saleur, "Correlations in one dimensional quantum impurity problems with an external field", cond-mat/9611025, *Nucl. Phys.* **B490** (1997), 543–575

[83] F. Lesage, H. Saleur, "Correlations in one dimensional quantum impurity problems with an external field or a temperature", cond-mat/9612050, *Nucl. Phys.* **B493** (1997), 613–639

[84] Y. Huang, G. Ouillon, H. Saleur and D. Sornette, "Spontaneous generation of discrete scale invariance in growth models", *Phys. Rev.* **E55** (1997), 6433–6447

[85] A. Leclair, F. Lesage, S. Lukyanov, H. Saleur, "The Maxwell-Bloch Theory in Quantum Optics and the Kondo Model", hep-th/9701022, *Phys. Lett.* **A235** (1997), 203–208

[86] F. Lesage, H. Saleur, P. Simonetti, "Tunneling in quantum wires I: Exact solution of the spin isotropic case", cond-mat/97030220, *Phys. Rev.* **B56** (1997), 7598–7606

[87] F. Lesage, H. Saleur, P. Simonetti, "Tunneling in quantum wires II: a new line of IR fixed points", cond-mat/9707131, *Phys. Rev.* **B57** (1998), 4694–4707.

[88] F. Lesage, H. Saleur, "Boundary interactions changing operators and dynamical correlations in quantum impurity problems", cond-mat/9712019, *Phys. Rev. Lett.* **80** (1998), 4370–4373

[89] F. Lesage, H. Saleur, "Boundary conditions changing operators in non conformal theories", hep-th/980 1089, *Nucl. Phys.* **B520** (1998), 563–593.

[90] F. Lesage, H. Saleur, P. Simonetti, "Boundary flows in minimal models", hep-th/9802061, *Phys.Lett.* **B427** (1998) , 85–92

[91] I. Affleck, M. Oshikawa, H. Saleur, "Boundary critical phenomena in the three state Potts model", cond-mat/9804117, *J. Phys.* **A31** (1998), 5827–5842

[92] H. Saleur, P. Simonetti, "Multi parameter integrable theories with N bosons", hep-th/9804080, *Nucl. Phys.* **B535** (1998), 596–620

[93] P. Fendley, H. Saleur, "Self-duality in quantum impurity problems", cond-mat/9804173, *Phys. Rev. Lett.* **81** (1998) , 2518–2521

[94] R. Konik, F. Lesage, A. W. W. Ludwig, H. Saleur, "Two-leg ladders and carbon nanotubes: exact properties at finite doping", cond-mat/9806334, *Phys. Rev.* **B61** (2000) 4983.

[95] P. Fendley, H. Saleur, "Hyperelliptic curves for multi-channel quantum wires and the multi-channel Kondo problem", cond-mat/9809259, *Phys. Rev.* **B60** (1999) 11432–11440

[96] H. Saleur, "The long delayed solution of the Bukhvostov Lipatov model", hep-th/9811023, *J. Phys.* **A32** (1999) L207–L213

[97] F. Lesage, H. Saleur, "Strong coupling resistivity in the Kondo model", cond-mat/9811172, *Phys. Rev. Lett.* **82** (1999), 4540–4543

[98] F. Lesage, H. Saleur, "Perturbation of IR fixed points and duality in quantum impurity problems", cond-mat/9812045, *Nucl. Phys.* **B546** (1999), 585–620.

[99] P. Fendley, H. Saleur, "Differential equations and duality in massless integrable field theories at zero temperature", solv-int/9904012, *Nucl. Phys.* **B574** (2000), 571–586.

[100] R. Egger, A. Komnik and H. Saleur, "On the effect of irrelevant boundary scaling operators", cond-mat/9904314, *Phys. Rev.* **B60** (1999), R5113–R5116.

[101] H. Saleur, "The continuum limit of $sl(N/K)$ integrable super spin chains", solv-int/9905007, *Nucl. Phys.* **B578** (2000), 552–576.

[102] H. Saleur, "A comment on finite temperature correlations functions in integrable quantum field theories", hep-th/9909019, *Nucl. Phys.* **B567** (2000), 602–610.

[103] R. Egger, H. Grabert, A. Koutouza, H. Saleur and F. Siano, "Current bistability and hysteresis in strongly correlated quantum wires", cond-mat/0002290, *Phys. Rev. Lett.* **34** (2000), 3682–3285

[104] H. Saleur and B. Wehefritz-Kaufmann , "Thermodynamics of the complex $SU(3)$ Toda theory", hep-th/0003217, *Phys. Lett.* **B481** (2000), 419–426.

[105] A. Koutouza, H. Saleur and F. Siano, "External voltage sources and tunneling in quantum wires", cond-mat/0007037, *J. Phys.* **A34** (2001), 5497–5515.

[106] I. Affleck, M. Oshikawa, H. Saleur, "Quantum Brownian motion on a triangular lattice and $c = 2$ boundary conformal field theory", cond-mat/0009084, *Nucl. Phys.* **B594** (2001), 535–606.

[107] R. Konik, A. Ludwig and H. Saleur, "Interplay of the scaling limit and the renormalization group: Implications for symmetry restoration", cond-mat/0009166, *Phys. Rev.* **B66** (2002), 075105.

[108] H. Saleur and U. Weiss, "Point contact tunneling in the fractional quantum Hall effect: an exact determination of the statistical fluctuations", cond-mat/0009408, *Phys. Rev.* **B63** (2001), 201302–201305.

[109] R. Konik, A. Ludwig and H. Saleur, "Transport through quantum dots: analytic results from integrability", cond-mat/0010270, *Phys. Rev. Lett.* **87** (2001), 236801.

[110] I. Affleck, M. Oshikawa and H. Saleur, "Boundary critical phenomena in $SU(3)$ spin chains", cond-mat/0011454, *J. Phys.* **A34** (2001), 1073–1088.

[111] R. Konik, A. Ludwig and H. Saleur, " Transport in Quantum Dots from the Integrability of the Anderson Model", cond-mat/0103044, *Phys. Rev.* **B66** (2002), 125304.

[112] P. Fendley and H. Saleur, "BPS kinks in the Gross Neveu model", hep-th/0105148, *Phys.Rev.* **D65** (2002), 025001.

[113] N. Read and H. Saleur, "Exact spectra of conformal supersymmetric non linear sigma models in two dimensions", hep-th/0106124, *Nucl. Phys.* **B613** (2001), 409–444.

[114] J.S. Caux, H. Saleur and F. Siano, "The Josephson current in Luttinger liquid-superconductor junctions", cond-mat/0109103, *Phys. Rev. Lett.* **88** (2002), 106402-106406.

[115] H. Saleur and B. Wehefritz-Kaufman, "Integrable quantum field theories with $OSP(m/2n)$ symmetries", hep-th/0112095, *Nucl. Phys.* **628** (2002), 407–441.

[116] J. L. Jacobsen, N. Read and H. Saleur, "Dense loops, supersymmetry and Goldstone phases in two dimensions", cond-mat/0205033, *Phys. Rev. Lett. 90* (2003), 090601–090604.

[117] F. Lesage, P. Mathieu, J. Rasmussen and H. Saleur, "The $SU(2)_{-1/2}$ WZW model and the beta-gamma system", *Nucl. Phys.* **B647** (2002), 363–403.

[118] A. Koutouza, H. Saleur and B. Trauzettel, "How irrelevant operators affect the determination of fractional charges ", cond-mat/0212029, *Phys. Rev. Lett.* **91** (2003), 02680–026804.

[119] H. Saleur and B. Wehefritz-Kauffman, "Integrable quantum field theories with supergroup symmetries: a detailed study of the $OSP(1/2)$ case", hep-th/0302144, *Nucl. Phys.***B663** (2003), 443.

[120] A. Koutouza, F. Lesage and H. Saleur, "Scattering amplitudes in non Fermi liquids systems", cond-mat/0304058, *Phys. Rev.* **B68** (2003) 115422.

[121] J.S. Caux, H. Saleur and F. Siano, "The two-boundary sine-Gordon model", hep-th/0306328, *Nucl. Phys.* **B672** (2003) 411.

[122] F. Lesage, P. Mathieu, J. Rasmussen and H. Saleur, "Logarithmic lift of the $SU(2)_{-1/2}$ WZW model '', hep-th/0311039, *Nucl. Phys.* **B647** (2002) 363.

[123] I. Safi and H. Saleur, "A one channel conductor in an Ohmic environment: mapping to a TLL and full counting statistics", cond-mat/0312477, *Phys. Rev. Lett.***93** (2004) 126602.

[124] B. Trauzettel, P. Roche, C. Glattli and H. Saleur, "On the determination of fractional charge through shot noise measurments", cond-mat/0312525, *Phys. Rev.* **B70** (2004) 233301.

[125] J. L. Jacobsen, N. Read and H. Saleur, "The traveling salesman problem, conformal invariance and dense polymers", cond-mat/0403277, *Phys. Rev. Lett.* **90** (2003) 038701.

[126] S. Caracciolo, J. L. Jacobsen, H. Saleur, A. D. Sokal, A. Sportiello, "Fermionic field theory for trees and forests" cond-mat/0403271,*Phys. Rev. Lett.* **93** (2004) 080601.

[127] F. Essler, H. Frahm and H. Saleur, "Continuum limit of the $sl(2/1)$ $3, \bar{3}$ superspin chain", cond-mat/0501197, *Nucl.Phys.* **B712** (2005) 513-572.

[128] J. L. Jacobsen and H. Saleur, "The arboreal gas and the supersphere sigma model", cond-mat/0502052, *Nucl. Phys.* **B716** (2005) 439-461.

[129] V. Schomerus and H. Saleur, "The $GL(1/1)$ WZW model: from supergeometry to logarithmic CFT", hep-th/0510032, *Nucl.Phys.* **B734** (2006) 221-245.

[130] J. L. Jacobsen and H. Saleur, "The antiferromagnetic transition for the square-lattice Potts model", cond-mat/0512058, *Nucl.Phys.* **B743** (2006) 207-248.

[131] A. Komnik and H. Saleur, "Full counting statistics of chiral Luttinger liquids with an impurity", cond-mat/0603572, Phys. Rev. Lett. 96 (2006) 216406.

[132] H. Saleur and V. Schomerus, "On the $SU(2|1)$ WZW model and its applications in statistical mechanics", hep-th/0611147, *Nucl. Phys.* **B775** (2007) 312-340.

[133] J. Jacobsen and H. Saleur, "Conformal boundary loop models", math-ph/0611078, *Nucl. Phys.* **B788** (2007) 137-166.

[134] Y. Ikhlef, J. Jacobsen and H. Saleur, "A staggered 6 vertex model wih a non compact continuum limit", cond-mat/0612037, *Nucl. Phys.* **B789** (2007) 483-524.

[135] Y. Ikhlef, J. Jacobsen and H. Saleur, "Non intersection exponents of fully packed trails on the square lattice ", cond-mat/0612258, *J. Stat. Mech.* (2007) P05005.

[136] N. Read and H. Saleur, " Enlarged symmetry algebras of spin chains, loop models, and S-matrices", hep-th/0701259, *Nucl. Phys.* **B 777** (2007) 263-315.

[137] N. Read and H. Saleur, "Associative algebraic approach to logarithmic conformal field theories", cond-mat/0701259, *Nucl. Phys.* **B777** (2007) 316-351.

[138] E. Boulat and H. Saleur, "Exact low temperature results for transport properties of the interacting resonant level model", cond-mat/0703545, *Phys. Rev.* **B77** (2007), 033409.

[139] J. L. Jacobsen and H. Saleur, "Combinatorial aspects of boundary loop models", arXiv:0709.0812, J. Stat. Mech. (2008) P01021.

[140] R. Yu, H. Saleur and S. Haas, "Entanglement Entropy in the Two-Dimensional Random Transverse Field Ising Model", arXiv:0709.3840, *Phys. Rev.* **B 77** (2008) 140402(R).

[141] J. L. Jacobsen and H. Saleur, "Exact valence bond entanglement entropy and probability distribution in the XXX spin chain and the Potts model", arXiv:0711.3391,*Phys. Rev. Lett.* **100**(2008) 087205.

[142] A.O. Gogolin, R.M. Konik, A.W.W. Ludwig and H. Saleur, "Counting statistics for the Anderson impurity model: Bethe ansatz and Fermi liquid study", *Ann. der Physik* **16** (2007) 678.

[143] C. Candu and H. Saleur, "A lattice approach to the conformal $OSp(2S+2|2S)$ supercoset sigma model. Part I: Algebraic structures in the spin chain. The Brauer algebra", arXiv:0801.0430, *Nucl. Phys.* **B 808** (2009) 441

[144] C. Candu and H. Saleur, "A lattice approach to the conformal $OSp(2S+2|2S)$ supercoset sigma model. Part II: The boundary spectrum", arXiv:0801.0444, *Nucl. Phys.* **B 808** (2009) 487

[145] I. Affleck, L. Borda and H. Saleur, "Friedel oscillations and the Kondo screening cloud", Phys. Rev. B77, 180404(R) (2008), arXiv:0802.0280

[146] J.L. Jacobsen and H. Saleur, "Boundary chromatic polynomial", arXiv:0803.2665, *J. Stat. Phys.* **132** (2008) 707

[147] E. Boulat, H. Saleur and P.Schmitteckert, 'Two fold advance in the theoretical understanding of far from equilibrium properties of interacting nanostructures", arXiv:0806.3731, *Phys. Rev. Lett.***101** (2008) 140601

[148] L.Campos-Venuti, H. Saleur and P. Zanardi, "Universal sub-leading terms in ground state fidelity", arXiv:0807.0104., *Phys. Rev.* **B 79** (2009) 092405.

[149] J. Dubail, J. L.Jacobsen and H. Saleur, "Conformal two-boundary loop model on the annulus", arXiv:08 12.2746, *Nucl. Phys.* **B 813** (2009) 430.

[150] Y. Ikhlef, J.L. Jacobsen and H. Saleur, "A Temperley-Lieb quantum chain with two- and three-site interactions", arXiv:0901.4685,*J. Phys. A: Math. Theor.* **42** (2009) 292002

[151] J. Dubail, J.L. Jacobsen and H. Saleur, "Conformal boundary conditions in the critical O(n) model and dilute loop models", arXiv:0905.1382, *Nucl.Phys.* **B827** (2010) 457.

[152] C. Candu, V. Mitev, T. Quella, H. Saleur and V. Schomerus, "The Sigma Model on Complex Projective Superspaces", arXiv:0908.0878, JHEP 1002:015,2010.

[153] C. Candu, J.L. Jacobsen, N. Read and H. Saleur, "Universality classes of polymer melts and conformal sigma models", arXiv:0908.1081, *J Phys.* **A43** (2010) 142001.

[154] J. Dubail, J.L. Jacobsen and H. Saleur, "Exact solution of the anisotropic special transition in the O(n) model in 2D", arXiv:0909.2949, *Phys. Rev. Lett.* **103** (2009) 145701

[155] H. Saleur and B. Pozsgay, "Scattering and duality in the 2 dimensional $OSP(2|2)$ Gross Neveu and sigma models", arXiv:0910.0637, JHEP 1002:008,2010.

[156] Y. Ikhlef, J.L. Jacobsen and H. Saleur, "The Z_2 staggered vertex model and its applications", arXiv:09 11.3003, *J. Phys.* **A 43** (2010) 225201.

[157] J. Dubail, J. L. Jacobsen and H. Saleur, "Conformal field theory at central charge $c = 0$: a measure of the indecomposability (b) parameters", *Nucl.Phys.***B834** (2010) 399, arXiv:1001.1151.

[158] A. Branschaedel, E. Boulat, H. Saleur and P. Schmitteckert, "Numerical Evaluation of Shot Noise using Real Time Simulations", arXiv:1004.4784, *Phys. Rev.* **B82** (2010) 205414-205417.

[159] A. Branschaedel, E. Boulat, H. Saleur and P. Schmitteckert, "Shot noise in the self-dual Interacting Resonant Level Model", arXiv:1004.4811, *Phys. Rev. Lett.* **105** (2010) 146805.

[160] J. Dubail, J. L. Jacobsen and H. Saleur, "Critical exponents of domain walls in the two-dimensional Potts model", arXiv:1008.1216, *J. Phys.* **A43** (2010) 482002.

[161] J. Dubail, J. L. Jacobsen and H. Saleur, "Bulk and boundary critical behaviour of thin and thick domain walls in the two-dimensional Potts model", arXiv:1010.1700, *J. Stat. Mech.* (2010) P12026.

[162] R. Bondesan, J.L. Jacobsen, H. Saleur, "Edge states and conformal boundary conditions in super spin chains and super sigma models", arXiv:1101.4361,*Nucl.Phys.* **B849** (2011) 461.

[163] R. Vasseur, J.L. Jacobsen, H. Saleur, "Indecomposability parameters in chiral Logarithmic Conformal Field Theory", arXiv:1103.3134, *Nucl.Phys.* **B851** (2011) 314.

[164] Y. Ikhlef, J. Jacobsen and H. Saleur, "An integrable spin chain for the $SL(2, R)/U(1)$ black hole sigma model", arXiv:1109.1119, *Phys. Rev. Lett.* **108** (2012) 081601.

[165] A. Komnik and H. Saleur, "Quantum fluctuation theorem in an interacting setup: point contacts in fractional quantum Hall edge state devices", arXiv:1109.3874, *Phys. Rev. Lett.* **107** (2011) 100601.

[166] R. Bondesan, I. A. Gruzberg, J.L. Jacobsen, H.Obuse, H. Saleur, "Exact exponents for the spin quantum Hall transition in the presence of multiple edge channels", arXiv:1109.4866, *Phys. Rev. Lett.* **108** (2012) 126801.

[167] R. Vasseur, A. Gainutdinov, J.L. Jacobsen and H. Saleur, "The puzzle of bulk conformal field theories at central charge $c = 0$", arXiv:1110.1327, *Phys. Rev. Lett.* **108** (2012) 161602.

168 R. Bondesan, J. Dubail, J. L. Jacobsen and H. Saleur, "Conformal boundary state for the rectangular geometry", arXiv:1110.6861, *Nucl.Phys.***B862** (2012) 553.

[169] A. Gainutdinov, N. Read and H. Saleur, "Continuum limit and symmetries of the periodic $gl(1|1)$ spin chain", arXiv:1112.3403, *Nucl. Phys.* **B871** (2013) 245–288.

[170] A. Gainutdinov, N. Read and H. Saleur, "Bimodule structure in the periodic $gl(1|1)$ spin chain", arXiv:1112.3407, *Nucl. Phys.* **B871** (2013) 289–329.

[171] R. Vasseur, J. L. Jacobsen and H. Saleur, "Logarithmic observables in critical percolation", arXiv:1206.2312, *J. Stat. Mech.* (2012) L07001.

[172] A. Gainutdinov, N. Read and H. Saleur, "Associative algebraic approach to logarithmic CFT in the bulk: the continuum limit of the $gl(1|1)$ periodic spin chain, Howe duality and the interchiral algebra", arXiv:1207.6334, *Comm. Math. Phys.* (2016) 35–103.

[172] R. Bondesan, J. L. Jacobsen and H. Saleur, "Rectangular amplitudes, conformal blocks, and applications to loop models", arXiv:1207.7005, *Nucl. Phys.***B867** (2013) 913–949.

[173] A. M. Gainutdinov, J.L. Jacobsen, H. Saleur and R. Vasseur, "A physical approach to the classification of indecomposable Virasoro representations from the blob algebra", arXiv:1212.0093, *Nucl. Phys.* **B873** (2013) 614–681.

[174] A.M. Gainutdinov, H. Saleur and I.Yu. Tipunin, " Lattice W-algebras and logarithmic CFTs", arXiv:12 12.1378, *J. Phys.* **A47** (2014) 495401 (49 pp), included in IOP select.

[175] L. Freton, E. Boulat and H. Saleur, "Infra-red expansion of entanglement entropy in the Interacting Resonant Level Model", arXiv:1301.6535, *Nucl. Phys.* **B874** (2013) 279–311

[176] A.M. Gainutdinov, J.L. Jacobsen, N. Read, H. Saleur and R. Vasseur, "Logarithmic Conformal Field Theory: a Lattice Approach", arXiv:1303.2082, *J. Phys.* **A 46** (2013) 494012

[177] R. Vasseur, K. Trinh, S. Haas and H. Saleur, " Crossover physics in the non-equilibrium dynamics of quenched quantum impurity systems", arXiv:1303.6655, *Phys. Rev. Lett.* **110** (2013) 240601–240605

[178] H. Saleur, P. Schmitteckert and R. Vasseur, "Entanglement in quantum impurity problems is non perturbative", arXiv:1305.1482, *Phys. Rev.* **B88** (2013) 085413–085426

[179] P. Schmitteckert, S. T. Carr and H. Saleur, "Transport through nano structures: finite time vs. finite size", arXiv:1307.7506, *Phys. Rev.***B 89** (2014) 081401

[180] R. Vasseur, J.L. Jacobsen and H. Saleur, "Universal entanglement crossover of coupled quantum wires", arXiv:1310.7925, *Phys. Rev. Lett.* **112**(2014) 106601–106605

[181] E. Vernier, J.L. Jacobsen and H. Saleur, "Non compact conformal field theory and the $a_2^{(2)}$ model in Regime III, *J. Phys. A: Math. Theor.* 47 (2014) 285202 (51pp), included in IOP select.

[182] E. Vernier, J.L. Jacobsen and H. Saleur, "Non compact continuum limit of two coupled Potts models", arXiv:1406.1353, *J. Stat. Mech.*, P10003 (33pp) (2014).

[183] A.M. Gainutdinov, N. Read, H. Saleur and R. Vasseur, "The periodic alternating $sl(2/1)$ spin chain and its continuum limit as a bulk logarithmic conformal field theory at c=0", arXiv:1409.0167, *J. High Energy Physics* 114 (69pp) (2015).

[184] S. Lukyanov, H. Saleur, J.L. Jacobsen and R. Vasseur, "Exact overlaps in the Kondo problem", arXiv:1411.1664, *Phys. Rev. Lett.* **114** (2014) 080601–080605.

[185] E. Vernier, J.L. Jacobsen and H. Saleur, "A new look at the collapse of two-dimensional polymers", arXiv:1505.0707, *J. Stat. Mech.*, P09001 (2015).

[186] Y. Ikhlef, J.L. Jacobsen and H. Saleur, "Three point functions in $c \leq 1$ Liouville theory and conformal loop ensembles", arXiv:1509.0358, *Phys. Rev. Lett.* **116** (2016) 130601

[187] E. Vernier, J.L. Jacobsen and H. Saleur, "Dilute oriented loop models", arXiv:1509.07768, *J. Phys.* **A49** (2016) 064002.

[188] E. Vernier, J. L. Jacobsen and H. Saleur, "The continuum limit of $a_{N-1}^{(2)}$ spin chains", arXiv:1601.01559, *Nuc. Phys.***B 911** (2016) 52-93.

[189] A. M. Gainutdinov and H. Saleur, "Fusion and braiding in finite and affine Temperley-Lieb categories", arXiv:1606.04530

[190] E. Vernier, J.L. Jacobsen and H. Saleur, "Elaborating the phase diagram of spin-1 anyonic chains", arXiv:1611.02236, SciPost Phys. 2, 004 (2017)

[191] R. Couvreur, J.L. Jacobsen and H. Saleur, "Entanglement in non-unitary quantum critical spin chains", arXiv:1611.08506, *Phys. Rev. Lett.* **119** (2017) 040601

[192] R. Vasseur and H. Saleur, "Universal entanglement dynamics following a local quench", arXiv:1701.08866, SciPost Phys. 3, 001 (2017)

[193] R. Vasseur, A. Roshani, S. Haas and H. Saleur, "Healing of defects in random antiferromagnetic spin chains", arXiv:1703.01315, EPL 119 50004 (2017)

[194] L. Campos Venuti, Z. Ma, H. Saleur and S. Haas, "Topological Protection of Coherence in a Dissipative Environment", arXiv:1703.03075, Phys. Rev. A 96, 053858 (2017)

[195] J. Belletête, A. M. Gainutdinov, J.L. Jacobsen, H. Saleur and R. Vasseur, "On the correspondence between boundary and bulk lattice models and (logarithmic) conformal field theories", arXiv:1705.07769, J. Phys. A50, 484002 (2017)

[196] A. M. Gainutdinov, J. L. Jacobsen and H. Saleur, "A fusion for the periodic Temperley-Lieb algebra and its continuum limit", arXiv:1712.07076

[197] E., J. L. Jacobsen and H. Saleur, "A distribution approach to finite-size corrections in Bethe Ansatz solvable models", arXiv:1801.05676, Nucl. Phys. B394 (2018) 96

[198] J. L. Jacobsen and H. Saleur, "Bootstrap approach to geometrical four-point functions in the two-dimensional critical Q-state Potts model: A study of the s-channel spectra", arXiv:1809.02191, J. High Energ. Phys. (2019) 2019: 84.

[199] R. Couvreur, E. Vernier, J.L. Jacobsen and H. Saleur, "On truncations of the Chalker-Coddington model", arXiv: 1809.07429, Nucl. Phys. B941, 507 (2019)

[200] E. Granet, J.L. Jacobsen and H. Saleur, "Spontaneous symmetry breaking in 2D supersphere sigma models and applications to intersecting loop soups", arXiv:1810.07807, J. Phys. A52, 345001 (2019)

[201] K. Bizhdiev, G. Misguich and H. Saleur, "Out-of-equilibrium transport in the interacting resonant level model and comparison with the boundary sine-Gordon model", arXiv:1810.11058, Phys. Rev. B100, 075157 (2019)

[202] J. Belletête, A.M. Gainutdinov, J. L. Jacobsen, T. Saleur and T. Tavares, "Topological defects in lattice models and affine Temperley-Lieb algebra", arXiv:1811.02251

[203] E. Granet, J.L. Jacobsen and H. Saleur, "Analytical results on the Heisenberg spin chain in a magnetic field", arXiv:1901.05878, J. Phys. A52, 255302 (2019)

[204] A. Roy and H. Saleur, "Quantum Electronic Circuit Simulation of Generalized sine-Gordon Models", arXiv:1902.09530, Phys. Rev. B 100, 155425 (2019)

[205] N. Robertson, J.L. Jacobsen and H. Saleur, "Conformally invariant boundary conditions in the antiferromagnetic Potts model and the SL(2,R)/U(1) sigma model", arXiv:1906.07565, JHEP10(2019) 254

[206] T. Yoshimura, K. Bizhdiev and H. Saleur, "Non-hermitian quantum impurity systems in and out of equilibrum: the non-interacting case", arXiv:2002.08478

15

[207] Y. He, L. Grans-Samuelsson, J.L. Jacobsen and H. Saleur, "Four-point geometrical correlation functions in the two-dimensional Q-state Potts model: connections with the RSOS models", arXiv:2002.09071, JHEP05(2020)156

[208] N. F. Robertson, M. Pawelkiewicz, J.L. Jacobsen and and H. Saleur, "Integrable boundary conditions in the antiferromagnetic Potts model", arXiv:2003.03261, JHEP05(2020)144

[209] J. Belletête, A.M. Gainutdinov, J.L. Jacobsen, H. Saleur and T.S. Tavares, "Topological defects in periodic RSOS models and anyonic chains", arXiv:2003.11293

[210] C. Tan, H. Saleur and S. Haas, "Detection of Topology via Entanglement Oscillations", arXiv:2004.07186, Phys. Rev. B 101, 235155 (2020)

[211] A. Roy, F. Pollmann and H. Saleur, "Entanglement Hamiltonian of the 1+1-dimensional free, compactified boson conformal field theory", arXiv:2004.14370, J. Stat. Mech. (2020) 083104

[212] E. Granet, J.L. Jacobsen and h. Saleur, "Analytic continuation of Bethe energies and application to the thermodynamic limit of the SL(2,C) non-compact spin chains", arXiv:2005.06030

[213] Y. He, J.L. Jacobsen and H. Saleur, "Geometrical four-point functions in the two-dimensional critical Q-state Potts model: The interchiral conformal bootstrap", arXiv:2005.07258

[214] A. Roy, D. Schuricht, J. Hauschild, F. Pollmann and H. Saleur, "The quantum sine-Gordon model with quantum circuits", arXiv:2007.06874

[215] L. Grans-Samuelsson, L. Liu, Y. He, J.L. Jacobsen and H. Saleur, "The action of the Virasoro algebra in the two-dimensional Potts and loop models at generic Q", arXiv:2007.11539

[216] L. Grans-Samuelsson, J. L. Jacobsen and H. Saleur, "The action of the Virasoro algebra in quantum spin chains. I. The non-rational case", arXiv:2010.12819

[217] N. F. Robertson, J. L. Jacobsen and H. Saleur, "Lattice regularisation of a non-compact boundary conformal field theory", arXiv:2012.07757

Addendum: Earthquake phenomenology

[01] H. Saleur, C. G. Sammis, D. Sornette, "Discrete scale invariance, complex fractal dimensions and log-periodic fluctuations in seismicity"', *J. Geo. Res.* **101** (1996), 17,661–17,677

[02] A. Johansen, D. Sornette, H. Wakita, U. Tsunogai, W. Newman, H. Saleur, 'Discrete scaling in earthquake precursory phenomena: evidence in the Kobe earthquake, Japan", *J. Phys. I,* **6** (1996), 1391–1402

[03] Y. Huang, H. Saleur, C. Sammis, D. Sornette, " Precursors, aftershocks, criticality and self-organized criticality", cond-mat/9612065, *Euro. Phys. Lett.* **41** (1998), 43–48

[04] Y. Huang, A. Johansen, M.W. Lee, H. Saleur and D. Sornette, "Artifactual log-periodicity in finite size data: Relevance for earthquake aftershocks", cond-mat/9911421, *J. Geophys. Res.* **105** (2000), 25451–25471.

[05] A. Johansen, H. Saleur and D. Sornette, " New evidence of earthquake precursory phenomena in the 17 jan. 1995 Kobe earthquake, Japan", cond-mat/9911444, *Eur. Phys. J. bf B 15* (2000), 551–555.

[06] Y. Huang, H. Saleur and D. Sornette, "Re-examination of Log periodicity observed in the foreshocks of the 1989 Loma Prieta earthquake", *J. Geo. Res.* **105** (2000), 28111–28223.

Publications (Reviews and Lecture Notes)

(The following do not contain new results)

[1] P.di Francesco, H.Saleur, "Two dimensional critical models on a torus", Proceedings of the Brasov Summer School, September 1987, Eds. P.Dita et al., Academic Press (1989), 63–89

[2] H.Saleur, "Lattice models and conformal field theories", Proceedings of the Cargese Summer School "Common Trends in Condensed Matter and Particle Physics", May 1988, Eds. C.Itzykson et al., *Phys. Rep.* **184** (1988), 177–191

[3] C.Itzykson, H. Saleur, J. B. Zuber, "Conformal invariance and applications to statistical mechanics", World Scientific (1988).

[4] H.Saleur, "Notes on some algebraic structures common to integrable lattice models and conformal field theories", Proceedings of the 8th Symposium on Theoretical Physics (Korea) "Selected topics in conformal field theory and statistical mechanics", July 1989, Ed. H.S.Song, Kyohak Yunkusa (1990), 112–128

[5] H.Saleur, "Representations of quantum groups at roots of unity", Proceedings of the Les Houches Winter School "Number Theory and Physics", March 1989, Eds. J.M.Luck et al., Springer Verlag (1990), 68–76

[6] H.Saleur, J.B.Zuber, "Integrable lattice models and quantum groups", Proceedings of the Trieste Spring School "String Theory and Quantum Gravity", April 1990, Eds. M.Green et al., World Scientific (1991), 1–53

[7] H.Saleur, "The multivariable Alexander polynomial and modern knot theory", Proceedings of the "20th International Conference on Differential Geometric Methods in Theoretical Physics", New York June 1991, Eds. S.Catto et al., World Scientific (1992), 1129–1142; and Proceedings of the "Research Conference on Advanced quantum field theory and Critical Phenomena", Como June 1991, Eds. M.Martellini et al., *Int. J. Mod. Phys.* **B6** (1992), 1857–1969

[8] H.Saleur, N.P.Warner, "Lattice models and $N = 2$ supersymmetry", Proceedings of the Cargese Summer School in Quantum Field Theory, Cargese, June 1994, Eds. L. Baulieu et al., North Holland

[9] P. Fendley, H. Saleur, A. Ludwig, "Exactly solvable field theory of tunneling between edge states in the fractional quantum Hall effect", Proceedings of the Trieste Conference "Quantum Field Theory and Statistical Mechanics", April 1995, Eds G. Mussardo et al., World Scientific

[10] P. Fendley, H. Saleur, "Tunneling between Edge States in the Fractional Quantum Hall Effect: A physical application for integrable $1 + 1$ quantum field theories", Proceedings of the Cargese summer school "Low dimensional applications of quantum field theory", Cargese, July 1995, Eds. L. Baulieu et al., Plenum Press

[11] P. Fendley, H. Saleur, A. Ludwig, "Quantum impurity problems in condensed matter physics", Proceedings of the 19th IUPAP International Conference on Statistical Physics, World Scientific

[12] F. Lesage, H. Saleur, "Correlations and transport in 1D quantum impurity problems", Proceedings of "The mathematical beauty of physics", Paris, June 1996, World Scientific

[13] F. Lesage, H. Saleur, P. Simonetti, Proceedings of the Workshop on "Calogero-Moser-Sutherland models", Montreal, Canada, October 1996, World Scientific

[14] H. Saleur, "Non perturbative field theory in quantum impurity problems", Lecture Notes from the Les Houches Summer School, "Topology and geometry in low dimensional physics", July 1998, North Holland

[15] H. Saleur, "Edge states tunneling in the fractional quantum Hall effect: physics and mathematics of the Yang Baxter equation", APCTP Bulletin, 3 (1999), 7.

[16] H. Saleur, "Lectures on non perturbative field theory and quantum impurity problems: Part II", NATO Advanced Study Institute/EC Summer School on "New theoretical approaches to strongly correlated systems", Newton Institute, April 2000.

[17] H. Saleur and B. Wehefritz-Kaufman, "Scattering in theories with supergroup symmetries", proceedings of "Statistical Field Theories", Como (Italy) Spring 2001.

[18] H. Saleur, "Symmetries of loop models and spin chains with alternating representations", Proceedings of the Solvay Institute Workshop "The Bethe ansatz 75 years later", Bruxelles (Belgium) Fall 2007.

[19] H. Saleur, "Non perturbative methods in quantum impurity problems", Proceedings of the Oxford Summer School, Oxford (England) Summer 2007.

[20] H. Saleur, "Super spin chains and super sigma models, a short introduction", Proceedings of the Les Houches (France) Summer School "Exact methods in low dimensional statistical physics and quantum computing", Summer 2008

[21] H. Saleur, "Associative algebraic approach to logarithmic conformal field theory", Proceedings of the International Congress on Mathematical Physics, Aalborg (Denmark) Summer 2012

[22] H. Saleur, "Exact field theoretic methods in out of equilibrium quantum impurity problems", Proceedings of the Les Houches (France) Summer School "Strongly interacting quantum systems out of equilibrium", Summer 2012

[23] A.M. Gainutdinov, J. L. Jacobsen, N. Read, H. Saleur and R. Vasseur, "Logarithmic conformal field theory, a lattice approach", Special Issue on LCFTs, J. Phys. A: Math. Theor. 46 (2013) 494012.

Funding History

From Sept.'91 to Dec.'92 coprincipal investigator (of five) on the Project "Geometry Symmetry and Physics" funded by DOE Math at Yale University. Amount of funding (per P.I.): 20,000$ a year.

From Sept.'91 to Dec.'92 partial support from the High-Energy DOE Grant in the Yale Physics Department. Amount of funding: unknown.

Fellow of the David and Lucile Packard Foundation from Sept.'91 to Sept.'96. Amount of funding 100,000$ a year.

National investigator (NSF physics) from Sept.'93 to Sept.'98. Amount of funding 25,000$ plus 32,500$ matched to the Packard award a year.

From Jan.'93 to Jan.'05, coprincipal investigator (of five) on the Project "High energy theory" funded by DOE Physics at USC. Amount of funding (per P.I.): approximately 80,000$ a year.

From Aug.'98 to Aug.'01, principal investigator on the Project "Spatial and temporal patterns of aftershocks", funded by NSF earth sciences. Amount of funding: approximately 60,000$ a year.

From Aug. '99 to Aug. '03, principal investigator (of 10) on the project "Southern California Strings Center", funded by USC and Caltech.

From Jan. '04 to Jan. '07, recipient of a Marie Curie International Grant "Quantum field theory and nanophysics".

From Jan. '06 to Jan. '09, principal investigator (of 3) and coorganizer of the INSTANS (Interdisciplinary satistical and field theory approaches to nanophysics and low dimensional systems) Network funded by the ESF (European Science foundation).

From Jan. '07 to Jan. '10, principal investigator on the Project "AdS-CFT" funded by the ANR (Agence Nationale pour la Recherche, France).

From Jan. '12 to Dec.'13, co principal investigator on the DOE grant "Quantum Quench Dynamics-Crossover Phenomena in Non-Equilibrium Correlated Quantum Systems" at USC

From Jan. '11 to Dec.'14, principal investigator of the project "DIME" funded by the ANR (Agence Nationale pour la Recherche, France).

From Sept.'14 to Aug.'17, co principal investigator on the DOE grant "Quench dynamics of disordered quantum systems", at USC.

From Oct. '15 to Oct.'21, principal investigator on an ERC (European Research Council) Advanced Grant, "Non-unitary Quantum Field Theories and the Integer Quantum Hall Effect".

PhD Students

Wai Ming Koo, PhD, Yale University (1994): "Some algebraic aspects of two dimensional statistical mechanics"

Sergei Skorik, PhD, USC (1996), " Topics in 2D integrable field theories with boundary interactions"

Yueqiang Huang, PhD, USC (1999), "Log-periodicity: sources, characterization, identification, and possible applications"

F. Siano, PhD, USC (2001), "Transport in strongly interacting systems"

A. Koutouza, PhD, USC (2003), "Quasiparticles in quantum impurity problems"

Y. Ikhlef, PhD, Université Orsay (France) (2007), "Aspects of two dimensional loop models". Co-direction with J. Jacobsen.

C. Candu, PhD, Université Paris VI (France) (2008), "Lattice discretizations of conformal sigma models on superspaces" . Co-direction with J. Jacobsen.

J. Dubail, PhD, Université Orsay (France), "Boundary loop models" (2010). Co-direction with J. Jacobsen.

R. Bondesan, PhD, Université Orsay (France), "Boundary conditions in SUSY sigma models and applications to the properties of network models" (2012)

R. Vasseur, PhD, Université Paris VI (France), "Indecomposability in field theory and applications to disordered systems and geometrical problems" (2013)

E. Vernier, PhD, Université Paris VI (France), "Non compact conformal field theories in statistical mechanics" (2014)

R. Couvreur, PhD, Université Paris VI (France), "Geometric lattice models and irrational conformal field theories" (2019)

E. Granet, PhD, Université Paris VI (France), "Advanced integrability techniques and analysis for quantum spin chains" (2019)

N. Robertson, PhD, PhD, Université Paris VI (France) "Open Boundary Lattice Models with non-compact continuum limits" (2020)

L. Grans Samuelsson and D. Chernyak, expected to defend in 2022 and 2023 respectively.