Publications by Helge Holden

(i) Theses


   Dr. Philos. Dissertation, University of Oslo 1985

(ii) Books

[1] Solvable Models in Quantum Mechanics
   Texts and Monographs in Physics
   (with S. Albeverio, F. Gesztesy, R. Høegh-Krohn)
   Translation into the Russian, Mir, Moscow 1991
   (Translated by Yu. A. Kuperin, K. A. Makarov, V. A. Geiler)
   Second edition with an Appendix by P. Exner
   AMS Chelsea Publishing, volume 350
   Chelsea Publishing, American Mathematical Society, Providence, 2005

   A Modeling, White Noise Functional Approach
   (with J. Ubøe, B. Øksendal, T. Zhang)

   Second edition, 2001

   Applied Mathematical Sciences, volume 152
   Second corrected printing, 2007
   Softcover and eBook, 2011
   (with N. H. Risebro)

   Volume I: (1 + 1)-Dimensional Continuous Models

1Updated January 3, 2020
Cambridge Studies in Advanced Mathematics, volume 79
(with F. Gesztesy)

Volume II: (1 + 1)-Dimensional Discrete Models
Cambridge Studies in Advanced Mathematics, volume 114
(with F. Gesztesy, J. Michor, and G. Teschl)

Analysis and Matlab Programs
(with K. H. Karlsen, K.-A. Lie, N. H. Risebro)

(iii) Publications in international, refereed journals

[1] The spectrum of defect periodic point interactions
Letters in Mathematical Physics 7 (1983) 221–228
(with R. Høegh-Krohn, F. Martinelli)

[2] The short range expansion
(with R. Høegh-Krohn, S. Johannesen)

[3] On absence of diffusion near the bottom of the spectrum
for a random Schrödinger operator on $L^2(\mathbb{R}^n)$
Communications in Mathematical Physics 93 (1984) 197–217
(with F. Martinelli)

[4] The short-range expansion in solid state physics
(with R. Høegh-Krohn, S. Johannesen)

[5] The short-range expansion for multiple well scattering theory
Journal of Mathematical Physics 26 (1985) 145–151
(with R. Høegh-Krohn, M. Mebkhout)

[6] The Fermi surface for point interactions
Journal of Mathematical Physics 27 (1986) 385–405
(with R. Høegh-Krohn, S. Johannesen, T. Wentzel-Larsen)

[7] On coupling constant thresholds in two dimensions

[8] A unified approach to eigenvalues and resonances of Schrödinger operators
using Fredholm determinants
Addendum 132 (1988) 309
[9] Point interactions in two dimensions. Basic properties, approximations and applications to solid state physics
   (with S. Albeverio, F. Gesztesy, R. Høegh-Krohn)

[10] Stochastic multiplicative measures, generalized Markov semigroups and group valued stochastic processes and fields
   (with S. Albeverio, R. Haegh-Krohn)

   (with F. Gesztesy, W. Kirsch)

[12] On the Riemann problem for a prototype of mixed type conservation law

[13] A new class of analytically solvable models in quantum mechanics on the line
   (with F. Gesztesy)

[14] A numerical method for first order nonlinear scalar hyperbolic conservation laws in one dimension
   (with L. Holden, R. Høegh-Krohn)

[15] A law of large numbers and a central limit theorem for the Schrödinger operator with zero range potentials
   (with R. Figari, A. Teta)

[16] Representation and construction of multiplicative noise
   (with S. Albeverio, R. Haegh-Krohn, T. Kolsrud)

[17] Trapping and cascading of eigenvalues in the large coupling limit
   *Communications in Mathematical Physics* **118** (1988) 597–634
   (with F. Gesztesy, D. Gurarie, M. Klaus, L. Sadun, B. Simon, P. Vogl)

[18] Construction of quantized Higgs-like fields in two dimensions
   (with S. Albeverio, R. Haegh-Krohn, T. Kolsrud)

   (with F. Bratvedt, K. Bratvedt, C. Buchholz, L. Holden, N. H. Risebro)

[20] Explicit construction of solutions of the modified Kadomtsev–Petviashvili equation
   (with F. Gesztesy, E. Saab, B. Simon)
[21] On the stochastic Buckley–Leverett equation  
(with N. H. Risebro)

[22] On the Toda and Kac–van Moerbeke systems  
(with F. Gesztesy, B. Simon, Z. Zhao)

[23] A method of fractional steps for scalar conservation laws without the CFL condition  
(with N. H. Risebro)

(with T. Lindstrøm, B. Øksendal, J. Ubøe, T.-S. Zhang)

[25] Discrete Wick calculus and stochastics functional equations  
(with T. Lindstrøm, B. Øksendal, J. Ubøe)

[26] Frontline and Frontsim; Two full scale, two-phase, black oil reservoir simulators based on front tracking  

[27] Comment on a recent note on the Schrödinger equation with a \(\delta'\)-interaction  
(with S. Albeverio, F. Gesztesy)

[28] The Burgers equation with a noisy force  
(with T. Lindstrøm, B. Øksendal, J. Ubøe, T.-S. Zhang)

[29] Trace formulae and inverse scattering for Schrödinger operators  
(with F. Gesztesy, B. Simon, Z. Zhao)

[30] Trace formulas and conservation laws for nonlinear evolution equations  
(with F. Gesztesy)

[31] A mathematical model of traffic flow on a network of unidirectional roads  
(with N. H. Risebro)

[32] The pressure equation for fluid flow in a stochastic medium  
(with T. Lindstrøm, B. Øksendal, J. Ubøe, T.-S. Zhang)

[33] Maximum principles for a class of conservation laws  
(with N. H. Risebro, A. Tveito)
[34] Absolute summability of the trace relation for certain Schrödinger operators
*Communications in Mathematical Physics* **168** (1995) 137–168
(with F. Gesztesy, B. Simon)

[35] Higher order trace relations for Schrödinger operators
(with F. Gesztesy, B. Simon, Z. Zhao)

[36] Conservation laws with a random source
(with N. H. Risebro)

[37] Algebro-geometric quasi-periodic finite-gap solutions of the
Toda and Kac–van Moerbeke hierarchy
(with W. Bulla, F. Gesztesy, G. Teschl)

[38] Finite difference approximation of the pressure equation for fluid flow in a stochastic medium
(with Y. Hu)

[39] A trace formula for multidimensional Schrödinger operators
(with F. Gesztesy, B. Simon, Z. Zhao)

[40] Riemann problems with a kink
(with N. H. Risebro)

[41] An unconditionally stable method for the Euler equations
(with K.-A. Lie, N. H. Risebro)

[42] Unconditionally stable splitting methods for the shallow water equations
(with R. Holdahl, K.-A. Lie)

[43] Dubrovin equations and integrable systems on hyperelliptic curves
(with F. Gesztesy)

(with K. H. Karlsen, N. H. Risebro)

[45] The classical Boussinesq hierarchy revisited
(with F. Gesztesy)

[46] Darboux-type transformations and hyperelliptic curves
*Journal für die reine und angewandte Mathematik, 527* (2000) 151–183
Borg-type theorems for matrix-valued Schrödinger operators
(with S. Clark, F. Gesztesy, B. Levitan)

The Riemann problem for an elastic string with a linear Hooke's law
(with H. Hanche-Olsen, N. H. Risebro)

Operator splitting methods for degenerate convection-diffusion equations II:
Numerical examples with emphasis on reservoir simulation and sedimentation
(with K. H. Karlsen, K.-A. Lie)

Algebro-geometric solutions of Camassa–Holm hierarchy
(with F. Gesztesy)

Real-valued algebro-geometric solutions of the Camassa–Holm hierarchy
(with F. Gesztesy)

The hyperelliptic ζ-function and the integrable massive Thirring equation
(with J. C. Eilbeck and V. Z. Enolskii)

On uniqueness and existence of entropy solutions of weakly coupled systems of nonlinear degenerate parabolic systems
(with K. H. Karlsen and N. H. Risebro)

Spectral analysis of Darboux transformations for the focusing NLS hierarchy
(with R. C. Cascaval, F. Gesztesy, and Y. Latushkin)

Stability of solutions of quasilinear parabolic equations
(with G. M. Coclite)

Algebro-geometric solutions of a discrete system related to the trigonometric moment problem
*Communications in Mathematical Physics* **258** (2005) 149–177
(with J. Geronimo, F. Gesztesy)

Convergence of a finite difference scheme for the Camassa–Holm equation
(with X. Raynaud)

Contract adjustment under uncertainty
(with L. and S. Holden)

Wellposedness for a parabolic-elliptic system
Global weak solutions to a generalized hyperelastic-rod wave equation
(with G. M. Coclite and K. H. Karlsen)

A convergent numerical scheme for the Camassa–Holm equation based on multipeakons
(with X. Raynaud)

Convergent difference schemes for the Hunter–Saxton equation
(with K. H. Karlsen and N. H. Risebro)

The Schrödinger–Maxwell system with Dirac mass
(with G. M. Coclite)

Global conservative solutions of the Camassa–Holm equation—a Lagrangian point of view
(with X. Raynaud)

The algebro-geometric Toda hierarchy initial value problem for complex-valued initial data
(with F. Gesztesy and G. Teschl)

Global conservative multipeakon solutions of the Camassa–Holm equation
(with X. Raynaud)

Global conservative solutions of the generalized hyperelastic-rod wave equation
(with X. Raynaud)

Local conservation laws and the Hamiltonian formalism for the Toda hierarchy revisited
(with F. Gesztesy)

Periodic conservative solutions of the Camassa–Holm equation
(with X. Raynaud)

Well-posedness of higher-order Camassa–Holm equations
(with G. M. Coclite and K. H. Karlsen)

Optimal rebalancing of portfolios with transaction costs
(with L. Holden)


[81] Symmetric waves are traveling waves. *International Mathematics Research Notices* 2009, Article ID rnp100, 19 pp. doi:10.1093/imrn/rnp100 (with M. Ehrnström and X. Raynaud)


[84] The Kolmogorov–Riesz compactness theorem
Addendum, ibid. 34 (2016) 243–245
(with H. Hanche-Olsen)

[85] Operator splitting for the KdV equation
(with K. H. Karlsen, N. H. Risebro, and T. Tao)

[86] Global semigroup of conservative solutions of the nonlinear variational wave equation
Archive for Rational Mechanics and Analysis 201 (2011) 871–964
(with X. Raynaud)

[87] Strong compactness of approximated solutions to degenerate elliptic-hyperbolic
equations with discontinuous flux function
(with K. H. Karlsen, D. Mitrovic, and E. Yu. Panov)

[88] Lipschitz metric for the periodic Camassa–Holm equation
(with K. Grunert and X. Raynaud)

[89] $L^\infty$ solutions for a model of polytropic gas flow with diffusive entropy
SIAM Journal of Mathematical Analysis 43 (2011) 2253–2274
(with H. Frid and K. H. Karlsen)

[90] The damped string problem revisited
(with F. Gesztesy)

[91] Lipschitz metric for the Camassa–Holm equation on the line
Discrete and Continuous Dynamical Systems, Series A 33 (2013) 2809–2827
(with K. Grunert and X. Raynaud)

[92] Abstract wave equations and associated Dirac-type operators
(with F. Gesztesy, J. M. Goldstein, and G. Teschl)

[93] Operator splitting for two-dimensional incompressible fluid equations
Mathematics of Computation 82 (2013) 719–748
(with K. H. Karlsen and T. Karper)

[94] Operator splitting for partial differential equations with Burgers nonlinearity
(with C. Lubich and N. H. Risebro)

[95] Global conservative solutions of the Camassa–Holm equation for initial data
with nonvanishing asymptotics
Discrete and Continuous Dynamical Systems, Series A 32 (2012) 4209–4227
(with K. Grunert and X. Raynaud)

[96] Global solutions for the two-component Camassa–Holm system
Communications in Partial Differential Equations 37 (2012) 2245–2271
Dirichlet-to-Neumann maps, abstract Weyl–Titchmarsh $M$-functions, and a generalized index of unbounded meromorphic operator-valued functions

(with J. Behrndt, F. Gesztesy, R. Nichols)

A Lipschitz metric for the Hunter–Saxton equation

(doi: 10.1080/03605302.2018.1547744)
(with J. A. Carrillo, K. Grunert)

Continuum limit of Follow-the-Leader models — a short proof

(with N. H. Risebro)

An improvement of the Kolmogorov–Riesz compactness theorem

(with H. Hanche-Olsen and E. Malinnikova)

Follow-the-Leader models can be viewed as a numerical approximation to the Lighthill–Whitham–Richards model for traffic flow

(with N. H. Risebro)

Models for dense multilane vehicular traffic

(with N. H. Risebro)

A Lipschitz metric for the Camassa–Holm equation

(with J. A. Carrillo, K. Grunert)

On the microscopic modeling of vehicular traffic on general networks

Preprint, submitted.
(with R. M. Colombo and F. Marcellini)

(iv) Publications in proceedings of conferences

[1] On absence of diffusion for low energy for a random Schrödinger operator on $L^2(\mathbb{R}^n)$

(with F. Martinelli)

[2] Some exactly solvable models in quantum mechanics and the low energy expansion

In Proceedings of the Second International Conference on Operator Algebras, Ideals, and Their Applications in Theoretical Physics, Leipzig 1983
Edited by H. Baumgärtel, G. Laßner, A. Pietsch, A. Uhlmann
Teubner, Leipzig 1984, pp. 12–28
Lifshitz singularity of the integrated density of states and absence of diffusion near the bottom of the spectrum for a random Hamiltonian
In *Chaotic Behavior in Quantum Systems: Theory and Applications*
Edited by G. Casati
(with F. Martinelli)

Markov cosurfaces and gauge fields
In *Stochastic Methods and Computer Techniques in Quantum Dynamics*  
*Acta Physica Austriaca, Supplementum XXVI*  
Edited by H. Mitter, L. Pittner  
(with S. Albeverio, R. Høegh-Krohn)

Markov processes on infinite dimensional spaces, Markov fields and Markov cosurfaces
In *Stochastic Space-Time Models and Limit Theorems*  
Edited by L. Arnold, P. Kotelenez  
Reidel, Dordrecht-Boston-Lancaster 1984, pp. 11–40  
(with S. Albeverio, R. Høegh-Krohn)

Stochastic Lie group-valued measures and their relations to stochastic curve integrals, gauge fields and Markov cosurfaces
In *Stochastic Processes — Mathematics and Physics, Proceedings Bielefeld 1984*  
Edited by S. Albeverio, P. Blanchard, L. Streit  
Lecture Notes in Mathematics, Volume 1158  
(with S. Albeverio, R. Høegh-Krohn)

Random fields with values in Lie groups and Higgs fields
In *Stochastic Processes in Classical and Quantum Systems. Proceedings, Ascona, Switzerland 1985*  
Edited by S. Albeverio, G. Casati, D. Merlini  
Lecture Notes in Physics, Volume 262  
(with S. Albeverio, R. Høegh-Krohn)

The Schrödinger operator for a particle in a solid with deterministic and stochastic point interactions
In *Schrödinger Operators, Aarhus 1985*  
Edited by E. Balslev  
Lecture Notes in Mathematics, Volume 1218  
(with S. Albeverio, F. Gesztesy, R. Høegh-Krohn, W. Kirsch)

On some recent results for conservation laws in one dimension
In *Recent Developments in Mathematical Physics*  
Edited by H. Mitter, L. Pittner  
Springer Proceedings in Physics
[10] On the Riemann problem for a prototype of mixed type conservation law. II
In *Current Progress in Hyperbolic Systems: Riemann Problems and Computations*
Contemporary Mathematics, Volume 100
Edited by W. B. Lindquist
American Mathematical Society, Providence 1989, pp. 331–367
(with L. Holden)

[11] A remark on the formation of crystals at zero temperature
In *Stochastic Methods in Mathematical Physics. Proceedings of the XXIV Karpacz Winter School on Theoretical Physics, Karpacz, Poland*
Edited by R. Gielerak, W. Karwowski
(with S. Albeverio, R. Høegh-Krohn, T. Kolsrud, M. Mebkhout)

[12] Some recent results for an explicit conservation law in one dimension
Edited by J. Ballmann, R. Jeltsch
Vieweg, Braunschweig
(with L. Holden)

[13] A covariant Feynman-Kac formula for unitary bundles over Euclidean space
In *Stochastic Partial Differential Equations and Applications II. Proceedings, Trento 1988*
Edited by G. Da Prato, L. Tubaro
Lecture Notes in Mathematics, Volume 1390
(with S. Albeverio, R. Høegh-Krohn, T. Kolsrud)

[14] Point interaction Hamiltonians for crystals with random defects
In *Applications of Self-Adjoint Extensions in Quantum Physics, Proceedings, Dubna, USSR, 1987*
Edited by P. Exner, P. Šeba
Lecture Notes in Physics, Volume 324
(with S. Albeverio, R. Figari, F. Gesztesy, R. Høegh-Krohn, W. Kirsch)

[15] On point interactions in magnetic field systems
In *Schrödinger Operators, Standard and Non-Standard*
Edited by P. Exner, P. Šeba
(with F. Gesztesy, P. Šeba)

[16] Some qualitative properties of 2 × 2 systems of conservation laws of mixed type
In *Nonlinear Evolution Equations*
A stochastic approach to conservation laws
Edited by B. Engquist, B. Gustafsson
(with N. H. Risebro)

A new representation of soliton solutions of the Kadomtsev–Petviashvili equation
In Ideas and Methods in Mathematical Analysis, Stochastics, and Applications. In Memory of Raphael Høegh-Krohn (1938-1988)
Edited by S. Albeverio, J. E. Fenstad, H. Holden, T. Lindstrøm
(with F. Gesztesy)

First order nonlinear scalar hyperbolic conservation laws in one dimension
In Ideas and Methods in Mathematical Analysis, Stochastics and Applications. In Memory of Raphael Høegh-Krohn (1938-1988)
Edited by S. Albeverio, J. E. Fenstad, H. Holden, T. Lindstrøm
(with L. Holden)

Front tracking for petroleum reservoirs
In Ideas and Methods in Mathematical Analysis, Stochastics, and Applications. In Memory of Raphael Høegh-Krohn (1938-1988)
Edited by S. Albeverio, J. E. Fenstad, H. Holden, T. Lindstrøm

Front tracking for groundwater simulations
Edited by T. F. Russell, R. E. Ewing, C. A. Brebbia, W. G. Gray, G. F. Pinder
(with F. Bratvedt, K. Bratvedt, C. F. Buchholz, T. Gimse, N. H. Risebro)

The Wick product
In Frontiers in Pure and Applied Probability, Volume I
Edited by H. Niemi, G. Högnas, A. N. Shiryaev, A. Melnikov
VSP and TVP Science Publishers, Utrecht/Moscow, 1993, pp. 29–67
(with H. Gjessing, T. Lindstrøm, B. Øksendal, J. Ubøe, T.-S. Zhang)

A review of stochastic methods applied to reservoir evaluation
In Stochastic Processes, Physics and Geometry II
Edited by S. Albeverio, U. Cattaneo, D. Merlini
Low temperature expansions around classical crystalline ground states
In *Stochastic Processes, Physics and Geometry II*
Edited by S. Albeverio, U. Cattaneo, D. Merlini
World Scientific, Singapore, 1995, pp. 29–38
(with S. Albeverio, R. Gielerak, T. Kolsrud, M. Mebkhout)

Three-dimensional reservoir simulation based on front tracking
In *North Sea Oil and Gas Reservoirs III*,
Edited by J. O. Aasen, E. Berg, A. T. Buller, O. Hjelmeland, R. M. Holt,
J. Kleppe, O. Torsæter
(with F. Bratvedt, K. Bratvedt, C. F. Buchholz, T. Gimse, L. Holden,
R. Olufsen, N. H. Risebro)

A mathematical model of traffic flow on a network of roads
Edited by A. Donato, F. Oliveri
(with N. H. Risebro)

Recent results for conservation laws — theory, numerics and applications
In *Industrial Mathematics Week, Trondheim August 1992. Proceedings*
Department of Mathematical Sciences, NTH, 1993, pp. 131–144
(with T. Gimse, N. H. Risebro)

Discrete Wick products
In: *Stochastic Analysis and Related Topics*
Edited by T. Lindstrøm, B. Øksendal, A. S. Üstünel
Stochastic Monographs, Volume 8
Gordon & Breach Science Publ., Amsterdam, 1993, pp. 123–148
(with T. Lindstrøm, B. Øksendal, J. Ubøe)

A comparison experiment for Wick multiplication and ordinary multiplication
In: *Stochastic Analysis and Related Topics*
Edited by T. Lindstrøm, B. Øksendal, A. S. Üstünel
Stochastic Monographs, Volume 8
Gordon & Breach Science Publ., Amsterdam, 1993, pp. 149–160
(with T. Lindstrøm, B. Øksendal, J. Ubøe, T. Zhang)

An equation modelling transport of a substance in a stochastic medium
In *Seminar on Stochastic Analysis, Random Fields and Applications*,
Edited by E. Bolthausen, M. Dozzi, and F. Russo
(with J. Gjerde, B. Øksendal, J. Ubøe, T. Zhang)

On new trace formulae for Schrödinger operators
[32] The stochastic Wick-type Burgers equation
Edited by A. Etheridge
(with T. Lindstrøm, B. Øksendal, J. Ubøe, T.-S. Zhang)

[33] Reservoir simulation by front tracking
In *Hyperbolic problems: Theory, Numerics, Applications*
Edited by J. Glimm, J. W. Grove, M. J. Graham, B. J. Plohr
World Scientific, Singapore, 1996, pp. 52–62
(with T. Gimse, N. H. Risebro)

[34] On trace formulas for Schrödinger-type operators
In *Multiparticle Quantum Scattering with Applications to Nuclear, Atomic and Molecular Physics*
Edited by D. G. Truhlar, B. Simon
IMA Volumes in Mathematics and its Applications
Springer, New York, pp. 121–145
(with F. Gesztesy)

(with N. H. Risebro, T. With Martinsen)

[36] A white noise approach to stochastic differential equations driven by Wiener and Poisson processes
In *Nonlinear Theory of Generalized Functions*
Editors M. Grosser, G. Hörmann, M. Kunzinger, M. Oberguggenberger
(with B. Øksendal)

[37] The Cole–Hopf and Miura transformations revisited
In *Mathematical Physics and Stochastic Analysis. Essays in Honour of Ludwig Streit*
Editors S. Albeverio, Ph. Blanchard, L. Ferreira, T. Hida, Y. Kondratiev, and R. Vilela Mendes
(with F. Gesztesy)

[38] Operator splitting methods for degenerate convection–diffusion equations I: Convergence and Entropy Estimates
In *Stochastic Processes, Physics and Geometry: New Interplays. II. A Volume in Honor of Sergio Albeverio*
Editors F. Gesztesy, H. Holden, J. Jost, S. Paycha, M. Röckner, S. Scarlatti
CMS Conference Proceedings, Volume 29
Canadian Mathematical Society, Providence (USA), 2000, pp. 293–316
(with K. H. Karlsen, K.-A. Lie)
In *Godunov Methods. Theory and Applications*
Editor E. F. Toro
(with K. H. Karlsen, K.-A. Lie, N. H. Risebro)

[40] A white noise approach to stochastic Neumann boundary value problems
(with B. Øksendal)

[41] A combined sine-Gordon and modified Korteweg–de Vries hierarchy and its algebro-geometric solutions
In *Differential Equations and Mathematical Physics*
Editors R. Weikard, G. Weinstein
AMS/IP Studies in Advanced Mathematics, Vol. 16
(with F. Gesztesy)

[42] The classical massive Thirring system revisited
In *Stochastic Processes, Physics and Geometry: New Interplays. I. A Volume in Honor of Sergio Albeverio*
Editors F. Gesztesy, H. Holden, J. Jost, S. Paycha, M. Röckner, S. Scarlatti
CMS Conference Proceedings, Volume 28
Canadian Mathematical Society, Providence (USA), 2000, pp. 163-200
(with V. Z. Enolskii, F. Gesztesy)

Editor A. Laptev

[44] Algebro-geometric solutions of the KdV and Camassa–Holm equation
*Oberwolfach Reports* 1 (2004), pp. 275–279
Editors A. Constantin, J. Escher
European Publishing House, Zürich
(with F. Gesztesy)

[45] Global weak solutions for a shallow water equation
In *Hyperbolic Problems: Theory, Numerics, Applications*
Editors S. Benzoni-Gavage, D. Serre
(with G. M. Coclite and K. H. Karlsen)

[46] A numerical scheme based on multipeakons for conservative solutions of the Camassa–Holm equation
In *Hyperbolic Problems: Theory, Numerics, Applications*
Editors S. Benzoni-Gavage, D. Serre
(with X. Raynaud)
[47] The Ablowitz–Ladik hierarchy revisited
In Methods of Spectral Analysis in Mathematical Physics
Editors J. Janas, P. Kurasov, A. Laptev, S. Naboko, G. Stolz
(with F. Gesztesy, J. Michor, G. Teschl)

[48] Convergence of front tracking and the Glimm scheme for a model of the flow of immiscible gases
In Hyperbolic Problems: Theory, Numerics and Applications. Part 2
Editors E. Tadmor, J.-G. Liu, A. Tzavaras
American Mathematical Society,
(with H. Sande and N. H. Risebro)

[49] Periodic conservative solutions for the two-component Camassa–Holm system
In Spectral Analysis, Differential Equations and Mathematical Physics:
A Festschrift for Fritz Gesztesy on the Occasion of his 60th Birthday
Editors H. Holden, B. Simon, and G. Teschl
American Mathematical Society,
(with K. Grunert and X. Raynaud)

[50] Lipschitz metric for the two-component Camassa–Holm system
In Hyperbolic Problems: Theory, Numerics, Applications
Editors F. Ancona, A. Bressan, P. Marcati, A. Marson
American Institute for Mathematical Sciences,
(with K. Grunert and X. Raynaud)

[51] On the index of meromorphic operator-valued functions and some applications
In Functional Analysis and Operator Theory for Quantum Physics
Editors J. Dittrich, H. Kovařík, and A. Laptev
EMS Publishing House, Zurich, 2017, pp. 95–128
(with J. Behrndt, F. Gesztesy, R. Nichols)

[52] Burgers meets Braess
Oberwolfach Reports, vol. 13, issue 2, pp. 1715–1717
Editors R. M. Colombo, P. LeFloch, C. Rohde

[53] On the equivalence of Eulerian and Lagrangian variables for the two-component Camassa–Holm system
In Current Research in Nonlinear Analysis: In Honor of Haim Brezis and Louis Nirenberg
Editor Th. M. Rassias
(with M. Grasmaier and K. Grunert)

[54] IMU Status Report
Editors B. Sirakov, P. Ney de Souza, and M. Viana
(v) Books edited

[1] Schrödinger Operators
Proceedings of the Nordic Summer School in Mathematics. Sønderborg, Denmark 1988
Lecture Notes in Physics, Volume 345
Springer-Verlag, Berlin-Heidelberg-New York-London-
(jointly edited with A. Jensen)

[2] Ideas and Methods in Mathematical Analysis, Stochastics,
(jointly edited with S. Albeverio, J. E. Fenstad, T. Lindstrøm)

In Memory of Raphael Høegh-Krohn (1938-1988)
(jointly edited with S. Albeverio, J. E. Fenstad, T. Lindstrøm)

World Scientific, Singapore, 1996, 1088 pp
(with P. C. Hemmer, S. K. Ratkje)

A Volume in Honor of Sergio Albeverio
CMS Conference Proceedings, Volume 28
(jointly edited with F. Gesztesy, J. Jost, S. Paycha, M. Röckner, S. Scarlatti)

A Volume in Honor of Sergio Albeverio
CMS Conference Proceedings, Volume 29
(jointly edited with F. Gesztesy, J. Jost, S. Paycha, M. Röckner, S. Scarlatti)

(with R. Piene)

[8] Nonlinear Partial Differential Equations and Hyperbolic Wave Phenomena
(jointly edited with K. H. Karlsen)

(jointly edited with K. H. Karlsen)

(jointly edited with K. Overskaug)
(jointly edited with B. Simon and G. Teschl)

(with R. Piene)

(With G.-Q. Chen and K. H. Karlsen)

(with R. Piene)

(vi) Reports

Preprint, Kungliga Tekniska Högskolan, 1990
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