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- Hitchin, N.J., Murray, M.K.: Spectral Curves and the ADHM Method **114**, 463 (1988)
- Hofer, H., → Ekeland, I. **113**, 419 (1987)
- Hoffmann-Ostenhof, M., Hoffmann-Ostenhof, T.: On the Asymptotics of Nodes of L^2 -Solutions of Schrödinger Equations in Dimensions ≥ 3 **117**, 49 (1988)
- Hoffmann-Ostenhof, T., → Hoffmann-Ostenhof, M. **117**, 49 (1988)
- Holden, H., → Gesztesy, F., et al. **118**, 597 (1988)
- Holley, R., Stroock, D.: Simulated Annealing via Sobolev Inequalities **115**, 553 (1988)
- Hübsch, T., → Green, P. **113**, 505 (1987)
- Hübsch, T., → Green, P. **115**, 231 (1988)
- Hübsch, T., → Green, P.S. **119**, 431 (1988)
- Hurd, T.R.: A Renormalization Prescription for Massless Quantum Electrodynamics **120**, 469 (1989)
- Hurst, C.A., → Grundling, H. **119**, 75 (1988)
- Hurtubise, J.: The Classification of Monopoles for the Classical Groups **120**, 613 (1989)

I

- I.-Liang Chern, Tai-Ping Liu: Convergence of Diffusion Waves of Solutions for Viscous Conservation Laws (*Erratum*) **120**, 525 (1988)
- Iagolnitzer, D., Magnen, J.: Asymptotic Completeness and Multiparticle Structure in Field Theories. II. Theories with Renormalization: The Gross-Neveu Model **111**, 81 (1987)
- Iagolnitzer, D., Magnen, J.: Bethe-Salpeter Kernel and Short Distance Expansion in the Massive Gross-Neveu Model **119**, 567 (1988)
- Iagolnitzer, D., Magnen, J.: Large Momentum Properties and Wilson Short Distance Expansion in Non-Perturbative Field Theory **119**, 609 (1988)
- Iagolnitzer, D., → Bros, J. **119**, 331 (1988)
- Illner, R., → Cercignani, C., et al. **114**, 687 (1988)
- Imbrie, J.Z., → Bałaban, T., et al. **114**, 257 (1988)
- Imbrie, J.Z., Newman, C.M.: An Intermediate Phase with Slow Decay of Correlations in One Dimensional $1/|x-y|^2$ Percolation, Ising and Potts Models **118**, 303 (1988)
- Intissar, A.: Etude spectrale d'une famille d'opérateurs non-symétriques intervenant dans la théorie des champs de reggeons **113**, 263 (1987)
- Iooss, G., Los, J.E.: Quasi-Genericity of Bifurcations to High Dimensional Invariant Tori for Maps **119**, 453 (1988)

- Isola, S.: Resonances in Chaotic Dynamics **116**, 343 (1988)
- Itzykson, C., → Cappelli, A., et al. **113**, 1 (1987)

J

- Jackiw, R., → Deser, S. **118**, 495 (1988)
- Jacobson, T., → Ashtekar, A., et al. **115**, 631 (1988)
- Jaffe, A., Lesniewski, A., Weitsman, J.: Index of a Family of Dirac Operators on Loop Space **112**, 75 (1987)
- Jaffe, A., Lesniewski, A., Weitsman, J.: The Two-Dimensional, $N=2$ Wess-Zumino Model on a Cylinder **114**, 147 (1988)
- Jaffe, A., → Bałaban, T., et al. **114**, 257 (1988)
- Jaffe, A., Lesniewski, A.: A Priori Estimates for $N=2$ Wess-Zumino Models on a Cylinder **114**, 553 (1988)
- Jaffe, A., Lesniewski, A., Osterwalder, K.: Quantum K -Theory. I. The Chern Character **118**, 1 (1988)
- Jakobczyk, L., Strocchi, F.: Euclidean Formulation of Quantum Field Theory Without Positivity **119**, 529 (1988)
- Jaskólski, Z.: The Integration of G -Invariant Functions and the Geometry of the Faddeev-Popov Procedure **111**, 439 (1987)
- Jen, E.: Linear Cellular Automata and Recurring Sequences in Finite Fields **119**, 13 (1988)
- Jen, E.: Cylindrical Cellular Automata **118**, 569 (1988)
- Jimbo, M., Miwa, T., Okado, M.: Solvable Lattice Models Related to the Vector Representation of Classical Simple Lie Algebras **116**, 507 (1988)
- Jimbo, M., Kuniba, A., Miwa, T., Okado, M.: The $A_n^{(1)}$ Face Models **119**, 543 (1988)

K

- Kac, V.G., → Arbarello, E., et al. **117**, 1 (1988)
- Kambe, T., → Giga, Y. **117**, 549 (1988)
- Kato, T.: Variation of Discrete Spectra **111**, 501 (1987)
- Katok, A.: The Growth Rate for the Number of Singular and Periodic Orbits for a Polygonal Billiard **111**, 151 (1987)
- Katz, A.: Theory of Matching Rules for the 3-Dimensional Penrose Tilings **118**, 263 (1988)
- Katz, A., → Oguey, C., et al. **118**, 99 (1988)
- Kawamoto, N., Namikawa, Y., Tsuchiya, A., Yamada, Y.: Geometric Realization of Conformal Field Theory on Riemann Surfaces **116**, 247 (1988)
- Keller, G.: All NSR-Models in Terms of Bosonic Strings: An Explicit Derivation **111**, 479 (1987)
- Kennedy, T., → Affleck, I., et al. **115**, 477 (1988)
- Kesten, H., → Aizenman, M., et al. **111**, 505 (1987)

- Khanin, K.M., Sinai, Ya.G.: A New Proof of M. Herman's Theorem **112**, 89 (1987)
- Killingback, T.-P., → Alvarez, O., et al. **111**, 1 (1987)
- Kiritsis, E.: A Topological Investigation of the Quantum Adiabatic Phase **111**, 417 (1987)
- Kirklin, K.H., → Greene, B.R. **113**, 105 (1987)
- Klaus, M., → Gesztesy, F., et al. **118**, 597 (1988)
- Klein, A., → Bovier, A., et al. **114**, 439 (1988)
- Klimek, S., Kondracki, W.: A Construction of Two-Dimensional Quantum Chromodynamics **113**, 389 (1987)
- Klimek, S., → Budzyński, R.J., et al. **120**, 481 (1989)
- Knizhnik, V.G.: Analytic Fields on Riemann Surfaces. II **112**, 567 (1987)
- Koiller, J., Carvalho, S.P.: Non-Integrability of the 4-Vortex System: Analytical Proof **120**, 643 (1989)
- Kondracki, W., → Klimek, S. **113**, 389 (1987)
- Kopper, C.: On the Borel Summability of Planar Perturbation Series: Transition to Minkowski Space **116**, 57 (1988)
- Korepin, V.E.: Dual Field Formulation of Quantum Integrable Models **113**, 177 (1987)
- Kotani, S., Simon, B.: Localization in General One-Dimensional Random Systems. II. Continuum Schrödinger Operators **112**, 103 (1987)
- Kotani, S., Ushiroya, N.: One-Dimensional Schrödinger Operators with Random Decaying Potentials **115**, 247 (1988)
- Kotani, S., Simon, B.: Stochastic Schrödinger Operators and Jacobi Matrices on the Strip **119**, 403 (1988)
- Koukiou, F., Petritis, D., Zahradnik, M.: Extension of the Pirogov-Sinai Theory to a Class of Quasiperiodic Interactions **118**, 365 (1988)
- Kuik, R.: The Global Markov Property for Equilibrium States Which are Determined by Correlations in a Strip **115**, 177 (1988)
- Kuik, R.: Markov and Stability Properties of Equilibrium States for Nearest-Neighbor Interactions **115**, 529 (1988)
- Kuniba, A., → Jimbo, M., et al. **119**, 543 (1988)
- Kunz, H.: The Quantum Hall Effect for Electrons in a Random Potential **112**, 121 (1987)
- Kupiainen, A., → Bricmont, J. **116**, 539 (1988)
- Kupiainen, A., → Felder, G., et al. **117**, 127 (1988)
- L**
- Lebowitz, J.L., → Aizenman, M., et al. **112**, 3 (1987)
- Lebowitz, J.L., → Dürr, D., et al. **113**, 209 (1987)
- Lebowitz, J.L., → Aizenman, M., et al. **116**, 527 (1988)
- Lebowitz, J.L., → Smedt, P. de, et al. **120**, 195 (1988)
- LeBrun, C., Rothstein, M.: Moduli of Super Riemann Surfaces **117**, 159 (1988)
- LeBrun, C.: Counter-Examples to the Generalized Positive Action Conjecture **118**, 591 (1988)
- Ledrappier, F., Young, L.-S.: Dimension Formula for Random Transformations **117**, 529 (1988)
- Lee, J., Sorkin, R.D.: Derivation of a Bogomol'ny Inequality in Five-Dimensional Kaluza-Klein Theory **116**, 353 (1988)
- Leon, J.-F.: Excited States for Coulomb Systems in the Hartree-Fock Approximation **120**, 261 (1988)
- Lesniewski, A., → Jaffe, A., et al. **112**, 75 (1987)
- Lesniewski, A., → Jaffe, A., et al. **114**, 147 (1988)
- Lesniewski, A., → Jaffe, A. **114**, 553 (1988)
- Lesniewski, A., → Jaffe, A., et al. **118**, 1 (1988)
- Levitov, L.S.: Local Rules for Quasicrystals **119**, 627 (1988)
- Lewis, J.T., → Cegła, W., et al. **118**, 337 (1988)
- Lewis, J.T., → Berg, M. van den, et al. **118**, 61 (1988)
- Lieb, E.H., Editorial: Dedicated to Walter Thirring on his 60th Birthday **112**, 1 (1987)
- Lieb, E.H., Yau, H.-T.: The Chandrasekhar Theory of Stellar Collapse as the Limit of Quantum Mechanics **112**, 147 (1987)
- Lieb, E.H., → Affleck, I., et al. **115**, 477 (1988)
- Lieb, E.H., → Conlon, J.G., et al. **116**, 417 (1988)
- Lieb, E.H., Sigal, I.M., Simon, B., Thirring, W.: Approximate Neutrality of Large-Z Ions **116**, 635 (1988)
- Lieb, E.H., Yau, H.-T.: The Stability and Instability of Relativistic Matter **118**, 177 (1988)
- Lin, C.S.: On the Second Eigenfunctions of the Laplacian in R^2 **111**, 161 (1987)
- Lindström, U., Roček, M.: New Hyperkähler Metrics and New Supermultiplets **115**, 21 (1988)
- Lions, P.L., → DiPerna, R.J. **120**, 1 (1988)
- Liu, T.-P., → Caffisch, R.E. **114**, 103 (1988)
- Liu, T.-P., Xin, Z.: Nonlinear Stability of Rarefaction Waves for Compressible Navier Stokes Equations **118**, 451 (1988)
- Liu, T.-P., → Chern, I.-L. **120**, 525 (1989)
- Liverani, C., → Smedt, P. de, et al. **120**, 195 (1988)
- Llave, R. de la, Moriyón, R.: Invariants for Smooth Conjugacy of Hyperbolic Dynamical Systems. IV **116**, 185 (1988)
- Loll, R.: The Extended Phase Space of the BRS Approach **119**, 509 (1988)
- Longo, R., → D'Antoni, C., et al. **116**, 175 (1988)
- Los, J.E., → Iooss, G. **119**, 453 (1988)
- M**
- Macris, N., Martin, Ph.A., Pulé, J.V.: Diamagnetic Currents **117**, 215 (1988)
- Magnen, J., → Iagolnitzer, D. **111**, 81 (1987)
- Magnen, J., → Iagolnitzer, D. **119**, 567 (1988)

- Magnen, J., → Iagolnitzer, D. **119**, 609 (1988)
- Magri, F., Morosi, C., Tondo, G.: Nijenhuis G -Manifolds and Lenard Bicomplexes: A New Approach to KP Systems **115**, 457 (1988)
- Maioli, M., → Caliceti, E., et al. **113**, 173 (1987)
- Maioli, M., → Caliceti, E., et al. **113**, 625 (1988)
- Maison, D., → Breitenlohner, P., et al. **120**, 295 (1988)
- Majda, A., → Constantin, P. **115**, 435 (1988)
- Malyshev, V.A.: Convergence in the Linked Cluster Theorem for Many Body Fermion Systems **119**, 501 (1988)
- Mañé, R.: Hyperbolicity, Sinks and Measure in One Dimensional Dynamics (*Erratum*) **112**, 721 (1987)
- Mangano, M., → Alvarez, O., et al. **111**, 1 (1987)
- Manin, Yu.I., → Baranov, A.M., et al. **111**, 373 (1987)
- Mann, B.M., → Boyer, C.P. **115**, 571 (1988)
- Manton, N.S.: Geometry of Skyrmions **111**, 469 (1987)
- Manton, N.S.: Connections on Discrete Fibre Bundles **113**, 341 (1987)
- Marchetti, P.A., → Fröhlich, J. **112**, 343 (1987)
- Marchetti, P.A.: Particle Structure Analysis of Soliton Sectors in Massive Lattice Field Theories **117**, 501 (1988)
- Marchetti, P., → Fröhlich, J. **116**, 127 (1988)
- Marchioro, C.: Euler Evolution for Singular Initial Data and Vortex Theory: A Global Solution **116**, 45 (1988)
- Marco, J.M., Moriyón, R.: Invariants for Smooth Conjugacy of Hyperbolic Dynamical Systems. III **112**, 317 (1987)
- Maremonti, P.: On the Asymptotic Behaviour of the L^2 -Norm of Suitable Weak Solutions to the Navier-Stokes Equations in Three-Dimensional Exterior Domains **118**, 385 (1988)
- Markarian, R.: Billiards with Pesin Region of Measure One **118**, 87 (1988)
- Markushevich, D.G., Olshanetsky, M.A., Perelomov, A.M.: Description of a Class of Superstring Compactifications Related to Semi-Simple Lie Algebras **111**, 247 (1987)
- Martin, Ph.A., → Macris, N., et al. **117**, 215 (1988)
- Martinelli, F., Scoppola, E.: Small Random Perturbations of Dynamical Systems: Exponential Loss of Memory of the Initial Condition **120**, 25 (1988)
- Mayer-Kress, G., Haken, H.: An Explicit Construction of a Class of Suspensions and Autonomous Differential Equations for Diffeomorphisms in the Plane **111**, 63 (1987)
- McClain, B., Roth, B.D.B.: Modular Invariance for Interacting Bosonic Strings at Finite Temperature **111**, 539 (1987)
- Mel'nikov, V.K.: Capture and Confinement of Solitons in Nonlinear Integrable Systems **120**, 451 (1989)
- Mel'nikov, V.K.: A Direct Method for Deriving a Multi-Soliton Solution for the Problem of Interaction of Waves on the x, y Plane **112**, 639 (1987)
- Menotti, P., Pelissetto, A.: General Proof of Osterwalder-Schrader Positivity for the Wilson Action **113**, 369 (1987)
- Merle, F., → Balabane, M., et al. **119**, 153 (1988)
- Mickelsson, J.: On the Geometry of Dirac Determinant Bundles in Two Dimensions **112**, 335 (1987)
- Mickelsson, J.: String Quantization on Group Manifolds and the Holomorphic Geometry of Diff S^1/S^1 **112**, 653 (1987)
- Mickelsson, J., Rajeev, S.G.: Current Algebras in $d+1$ -Dimensions and Determinant Bundles over Infinite-Dimensional Grassmannians **116**, 365 (1988)
- Mickelsson, J.: Current Algebra Representation for the $3+1$ Dimensional Dirac-Yang-Mills Theory **117**, 261 (1988)
- Miękisz, J.: Classical Lattice Gas Model with a Unique Nondegenerate but Unstable Periodic Ground State Configuration **111**, 533 (1987)
- Mikhailov, A.V., Shabat, A.B., Yamilov, R.I.: Extension of the Module of Invertible Transformations. Classification of Integrable Systems **115**, 1 (1988)
- Milton, G.W.: Multicomponent Composites, Electrical Networks and New Types of Continued Fraction I **111**, 281 (1987)
- Milton, G.W.: Multicomponent Composites, Electrical Networks and New Types of Continued Fraction II **111**, 329 (1987)
- Miwa, T., → Jimbo, M., et al. **116**, 507 (1988)
- Miwa, T., → Jimbo, M., et al. **119**, 543 (1988)
- Moerbeke, P. van, → Adler, M. **113**, 659 (1988)
- Montgomery, R.: The Connection Whose Holonomy is the Classical Adiabatic Angles of Hannay and Berry and Its Generalization to the Non-Integrable Case **120**, 269 (1988)
- Montgomery, R., → Bates, L. **118**, 635 (1988)
- Moore, G., → Alvarez-Gaumé, L., et al. **112**, 503 (1987)
- Moore, G., → Anderson, G. **117**, 441 (1988)
- Morchio, G., Strocchi, F.: Long Range Dynamics and Broken Symmetries in Gauge Models. The Stückelberg-Kibble Model **111**, 593 (1987)
- Mori, H., → Nakanishi, H., et al. **117**, 203 (1988)
- Moriyón, R., → Marco, J.M. **112**, 317 (1987)
- Moriyón, R., → Llave, R. de la **116**, 185 (1988)
- Morosi, C., → Magri, F., et al. **115**, 457 (1988)
- Müller, W., → Borisov, N.V., et al. **114**, 475 (1988)
- Murray, M.K., → Hitchin, N.J. **114**, 463 (1988)
- Murray, M.K.: Another Construction of the Central Extension of the Loop Group **116**, 73 (1988)
- Murray, M.K., → Garland, H. **120**, 335 (1988)

N

- Nachman, A., Sylvester, J., Uhlmann, G.: An n -Dimensional Borg-Levinson Theorem **115**, 595 (1988)
- Nachtergaele, B., → Fannes, M., et al. **114**, 537 (1988)
- Nahm, W., → Goddard, P., et al. **112**, 385 (1987)
- Nahm, W.: Lie Group Exponents and $SU(2)$ Current Algebras **118**, 171 (1988)
- Nakanishi, H., Hayashi, K., Mori, H.: Topological Classification of Unknotted Ring Defects **117**, 203 (1988)
- Nakashima, M.: Indefinite Harmonic Forms and Gauge Theory **117**, 109 (1988)
- Namikawa, Y., → Kawamoto, N., et al. **116**, 247 (1988)
- Narnhofer, H., → Connes, A., et al. **112**, 691 (1987)
- Navarro-Salas, J., → Aldaya, V. **113**, 375 (1987)
- Nelson, P., → Alvarez-Gaumé, L., et al. **112**, 503 (1987)
- Nelson, P.: Holomorphic Coordinates for Supermoduli Space **115**, 167 (1988)
- Nelson, P., → Giddings, S.B. **116**, 607 (1988)
- Nelson, P., → Giddings, S.B. **118**, 289 (1988)
- Neveu, A., West, P.: Group Theoretic Approach to the Open Bosonic String Multi-Loop \mathcal{S} -Matrix **114**, 613 (1988)
- Neveu, A., West, P.: Cycling, Twisting, and Sewing in the Group Theoretic Approach to Strings **119**, 585 (1988)
- Newman, C.M., → Aizenman, M., et al. **111**, 505 (1987)
- Newman, C.M., → Imbrie, J.Z. **118**, 303 (1988)
- Nugayev, R.M.: Particle Creation by a Black Hole as a Consequence of the Casimir Effect **111**, 579 (1987)
- Nusse, H.E., Yorke, J.A.: Is Every Approximate Trajectory of Some Process Near an Exact Trajectory of a Nearby Process? **114**, 363 (1988)
- Nuys, J., → Fairlie, D.B., et al. **117**, 595 (1988)

O

- Odziejewicz, A.: On Reproducing Kernels and Quantization of States **114**, 577 (1988)
- Oguey, C., Duneau, M., Katz, A.: A Geometrical Approach of Quasiperiodic Tilings **118**, 99 (1988)
- Okado, M., → Jimbo, M., et al. **116**, 507 (1988)
- Okado, M., → Jimbo, M., et al. **119**, 543 (1988)
- Olive, D.I., → Goddard, P., et al. **112**, 385 (1987)
- Olive, D., → Goddard, P., et al. **112**, 591 (1987)
- Olivieri, E., → Campanino, M. **111**, 555 (1987)
- Olshanetsky, M.A., → Markushevich, D.G., et al. **111**, 247 (1987)
- Osterwalder, K., → Jaffe, A., et al. **118**, 1 (1988)

Otway, T.H., Sibner, L.M.: Point Singularities of Coupled Gauge Fields with Low Energy **111**, 275 (1987)

P

- Palmer, J.: Pfaffian Bundles and the Ising Model **120**, 547 (1989)
- Papanicolaou, G.C., → Guo, M.Z., et al. **118**, 31 (1988)
- Park, Y.M.: Extension of Pirogov-Sinai Theory of Phase Transitions to Infinite Range Interactions. I. Cluster Expansion **114**, 187 (1988)
- Park, Y.M.: Extension of Pirogov-Sinai Theory of Phase Transitions to Infinite Range Interactions. II. Phase Diagram **114**, 219 (1988)
- Parker, T.H., → Groisser D. **112**, 663 (1987)
- Pasquier, V.: Etiology of IRF Models **118**, 355 (1988)
- Pedersen, H., Poon, Y.S.: Hyper-Kähler Metrics and a Generalization of the Bogomolny Equations **117**, 569 (1988)
- Pelissetto, A., → see Menotti, P. **113**, 369 (1987)
- Penner, R.C.: The Decorated Teichmüller Space of Punctured Surfaces **113**, 299 (1987)
- Penrose, O., → Pfister, C.-E. **115**, 691 (1988)
- Perelomov, A.M., → Markushevich, D.G., et al. **111**, 247 (1987)
- Perez, J.F., → Bovier, A., et al. **114**, 439 (1988)
- Periwal, V.: The Renormalization Flow, Spaces of Two-Dimensional Field Theories, and Connes' Geometry **120**, 71 (1988)
- Petritis, D., → Koukiou, F., et al. **118**, 365 (1988)
- Petz, D.: A Variational Expression for the Relative Entropy **114**, 345 (1988)
- Pfister, C.-E., Penrose, O.: Analyticity Properties of the Surface Free Energy of the Ising Model **115**, 691 (1988)
- Pfister, Ch.-Ed., → Fröhlich, J. **112**, 51 (1987)
- Phillipson, P.E.: Analytics of Period Doubling **111**, 137 (1987)
- Pilch, K., Warner, N.P.: String Structures and the Index of the Dirac-Ramond Operator on Orbifolds **115**, 191 (1988)
- Pilch, K., → Coquereaux, R. **120**, 353 (1989)
- Pohlmeyer, K., Rehren, K.-H.: The Invariant Charges of the Nambu-Goto Theory: Their Geometric Origin and Their Completeness **114**, 177 (1988)
- Pohlmeyer, K.: The Poisson Algebra of the Invariant Charges of the Nambu-Goto Theory: Casimir Elements **114**, 351 (1988)
- Pohlmeyer, K., Rehren, K.-H.: The Algebra Formed by the Invariant Charges of the Nambu-Goto Theory: Identification of a Maximal Abelian Subalgebra **114**, 55 (1988)
- Pokrovsky, S.V., → Bashilov, Yu.A. **113**, 115 (1987)

- Politzer, H.D., → Cline, J.M., et al. **112**, 217 (1987)
 Pollicott, M.: Margulis Distributions for Anosov Flows **113**, 137 (1987)
 Poon, Y.S., → Pedersen, H. **117**, 569 (1988)
 Potthoff, J., → Hida, T., et al. **116**, 235 (1988)
 Pressley, A.N., → Guest, M.A. **118**, 511 (1988)
 Previato, E., → Adams, M.R., et al. **117**, 451 (1988)
 Procesi, C., → Arbarello, E., et al. **117**, 1 (1988)
 Pulé, J.V., → Macris, N., et al. **117**, 215 (1988)
 Pulé, J.V., → Duffield, N.G. **118**, 475 (1988)
 Pulé, J.V., → Berg, M. van den, et al. **118**, 61 (1988)
 Pulvirenti, M., → Arkeryd, L., et al. **111**, 393 (1987)
 Pulvirenti, M.: Global Validity of the Boltzmann Equation for a Three-Dimensional Rare Gas in Vacuum **113**, 79 (1987)

Q

- Quandt, J.: On Structural Stability for Semiflows **117**, 191 (1988)

R

- Rabin, J.M., Freund, P.G.O.: Supertori are Algebraic Curves **114**, 131 (1988)
 Rabin, J.M., → Crane, L. **601** (1988)
 Rabinovici, E., → Altschuler, D., et al. **118**, 241 (1988)
 Radul, A., → Bershadsky, M. **116**, 689 (1988)
 Raggio, G.A., → Cegła, W., et al. **118**, 337 (1988)
 Rajeev, S.G., → Mickelsson, J. **116**, 365 (1988)
 Ralston, J., → Guillot, J.C., et al. **116**, 401 (1988)
 Reach, M.: Generating Difference Equations with the Darboux Transformation **119**, 385 (1988)
 Rehren, K.-H., → Pohlmeyer, K. **114**, 177 (1988)
 Rehren, K.-H., → Pohlmeyer, K. **114**, 55 (1988)
 Rehren, K.-H.: Locality of Conformal Fields in Two Dimensions: Exchange Algebra on the Light-Cone **116**, 675 (1988)
 Reisz, T.: A Convergence Theorem for Lattice Feynman Integrals with Massless Propagators **116**, 573 (1988)
 Reisz, T.: A Power Counting Theorem for Feynman Integrals on the Lattice **116**, 81 (1988)
 Reisz, T.: Renormalization of Feynman Integrals on the Lattice **117**, 79 (1988)
 Reisz, T.: Renormalization of Lattice Feynman Integrals with Massless Propagators **117**, 639 (1988)
 Restuccia, A., Taylor, J.G.: Absence of Divergences in Type II and Heterotic String Multi-Loop Amplitudes **112**, 447 (1987)
 Reule, O.: Initial Data Sets of Minimal Energy **117**, 625 (1988)
 Rey, S.-J., → Cline, J.M., et al. **112**, 217 (1987)
 Rinaldi, M., → Bonora, L., et al. **112**, 237 (1987)

- Rinaldi, M., → Bonora, L., et al. **114**, 381 (1988)
 Rivasseau, V., → David, F., et al. **116**, 215 (1988)
 Roček, M., → Lindström, U. **115**, 21 (1988)
 Rogers, A.: Fermionic Path Integration and Grassmann Brownian Motion **113**, 353 (1987)
 Rogers, T.D., → Shirvani, M. **118**, 401 (1988)
 Rohm, R., → Grinstein, B. **111**, 667 (1987)
 Rosly, A.A., Schwarz, A.S., Voronov, A.A.: Geometry of Superconformal Manifolds **119**, 129 (1988)
 Rosly, A.A., Schwarz, A.S., Voronov, A.A.: Superconformal Geometry and String Theory **120**, 437 (1989)
 Rosso, M.: Finite Dimensional Representations of the Quantum Analog of the Enveloping Algebra of a Complex Simple Lie Algebra **117**, 581 (1988)
 Roth, B.D.B., → McClain, B. **111**, 539 (1987)
 Rothstein, M., → LeBrun, C. **117**, 159 (1988)
 Rouet, A., → Dubois-Violette, M. **112**, 627 (1987)
 Rouet, A., → Dubois-Violette, M. **118**, 529 (1988)
 Ruback, P.J., → Gibbons, G.W. **115**, 267 (1988)
 Ruback, P.J.: Sigma Model Solitons and Their Moduli Space Metrics **116**, 645 (1988)
 Ruegg, H., → Goddard, P., et al. **112**, 385 (1987)
 Ruelle, D., → Aizenman, M., et al. **112**, 3 (1987)
 Ruelle, D., → Aizenman, M., et al. **116**, 527 (1988)
 Ruijsenaars, S.N.M.: Action-Angle Maps and Scattering Theory for Some Finite-Dimensional Integrable Systems. I. The Pure Soliton Case **115**, 127 (1988)
 Russo, L., → Gandolfi, A., et al. **114**, 549 (1988)

S

- Sachs, R.L., → Bona, J.L. **118**, 15 (1988)
 Sadowski, P., → Budzyński, R.J., et al. **120**, 481 (1989)
 Sadun, L., → Gesztesy, F., et al. **118**, 597 (1988)
 Santini, P.M., Fokas, A.S.: Recursion Operators and Bi-Hamiltonian Structures in Multidimensions. I **115**, 375 (1988)
 Santini, P.M., → Fokas, A.S. **116**, 449 (1988)
 Sauer, T., → Alligood, K.T. **120**, 105 (1988)
 Schaeffer, J.W., → Glassey, R.T. **119**, 353 (1988)
 Schechtman, V.V., → Beilinson, A.A. **118**, 651 (1988)
 Schenk, H.: On a Generalised Fourier Transform of Instantons Over Flat Tori **116**, 177 (1988)
 Schonmann, R.H.: Second Order Large Deviation Estimates for Ferromagnetic Systems in the Phase Coexistence Region **112**, 409 (1987)
 Schrader, R., → Borisov, N.V., et al. **114**, 475 (1988)
 Schwarz, A.S., → Baranov, A.M., et al. **111**, 373 (1987)
 Schwarz, A.S., → Rosly, A.A., et al. **119**, 129 (1988)
 Schwarz, A.S., → Rosly, A.A., et al. **120**, 437 (1989)

Schwimmer, A., → Goddard, P., et al. **112**, 385 (1987)

Scoppola, E., → Martinelli, F. **120**, 25 (1988)

Shabat, A.B., → Mikhailov, A.V., et al. **115**, 1 (1988)

Shinbrot, M., → Cercignani, C., et al. **114**, 687 (1988)

Shirvani, M., Rogers, T.D.: Ergodic Endomorphisms of Compact Abelian Groups **118**, 401 (1988)

Sibner, L.M., → Otway, T.H. **111**, 275 (1987)

Siedentop, H., Weikard, R.: On the Leading Energy Correction for the Statistical Model of the Atom: Interacting Case **112**, 471 (1987)

Sigal, I.M.: Geometry Theory of Stark Resonances in Multielectron Systems **119**, 287 (1988)

Sigal, I.M., → Lieb, E.H., et al. **116**, 635 (1988)

Simon, B., → Kotani, S. **112**, 103 (1987)

Simon, B., → Gesztesy, F. **116**, 503 (1988)

Simon, B., → Lieb, E.H., et al. **116**, 635 (1988)

Simon, B., → Gesztesy, F., et al. **118**, 597 (1988)

Simon, B., → Kotani, S. **119**, 403 (1988)

Simon, J., → Flato, M., et al. **112**, 21 (1987)

Sinai, Ya.G., → Khanin, K.M. **112**, 89 (1987)

Sjöstrand, J., → Gérard, C. **116**, 193 (1988)

Smedt, P. de, Dürr, D., Lebowitz, J.L., Liverani, C.: Quantum System in Contact with a Thermal Environment: Rigorous Treatment of a Simple Model **120**, 195 (1988)

Smit, D.-J.: String Theory and Algebraic Geometry of Moduli Spaces **114**, 645 (1988)

Smolin, L., → Ashtekar, A., et al. **115**, 631 (1988)

Sorkin, R.D.: A General Relation Between Kink-Exchange and Kink-Rotation **115**, 421 (1988)

Sorkin, R.D., → Lee, J. **116**, 353 (1988)

Soulé, C., → Bismut, J.-M., et al. **115**, 301 (1988)

Soulé, C., → Bismut, J.-M., et al. **115**, 49 (1988)

Soulé, C., → Bismut, J.-M., et al. **115**, 79 (1988)

Spencer, T., → Albanese, C., et al. **119**, 677 (1988)

Spencer, T., → Chayes, J.T., et al. **120**, 501 (1989)

Stark, J.: An Exhaustive Criterion for the Non-Existence of Invariant Circles for Area-Preserving Twist Maps **117**, 177 (1988)

Stasheff, J., → Bonora, L., et al. **112**, 237 (1987)

Stasheff, J., → Bonora, L., et al. **114**, 381 (1988)

Stasheff, J., → Fisch, J., et al. **120**, 379 (1989)

Strauss, W.A., → Glassey, R.T. **113**, 191 (1987)

Streit, L., → Hida, T., et al. **116**, 235 (1988)

Strocchi, F., → Morchio, G. **111**, 593 (1987)

Strocchi, F., → Jakobczyk, L. **119**, 529 (1988)

Stroock, D., → Holley, R. **115**, 553 (1988)

Sütő, A.: The Spectrum of a Quasiperiodic Schrödinger Operator **111**, 409 (1987)

Suzuki, N.: Witten's Gauge Field Equations and an Infinite-Dimensional Grassmann Manifold **113**, 155 (1987)

Świątek, G.: Rational Rotation Numbers for Maps of the Circle **119**, 109 (1988)

Sylvester, J., → Nachman, A., et al. **115**, 595 (1988)

Szász, D., Tóth, B.: Towards a Unified Dynamical Theory of the Brownian Particle in an Ideal Gas **111**, 41 (1987)

T

't Hooft, G.: Non-Perturbative 2 Particle Scattering Amplitudes in 2+1 Dimensional Quantum Gravity **117**, 685 (1988)

Taflin, E., → Flato, M., et al. **112**, 21 (1987)

Tai-Ping Liu → I.-Liang Chern **120**, 525 (1989)

Taormina, A., → Alberty, J., et al. **120**, 249 (1988)

Tasaki, H.: Hyperscaling Inequalities for Percolation **113**, 49 (1987)

Tasaki, H., → Affleck, I., et al. **115**, 477 (1988)

Taylor, J.G., → Restuccia, A. **112**, 447 (1987)

Teitelboim, C., → Henneaux, M. **115**, 213 (1988)

Teitelboim, C., → Fisch, J., et al. **120**, 379 (1989)

Thierry-Mieg, J., → Bernard, D. **111**, 181 (1987)

Thirring, W., → Connes, A., et al. **112**, 691 (1987)

Thirring, W., → Lieb, E.H., et al. **116**, 635 (1988)

Tian, G., Yau, S.-T.: Kähler-Einstein Metrics on Complex Surfaces with $C_1 > 0$ **112**, 175 (1987)

Titi, E.S., → Constantin, P. **119**, 177 (1988)

Tondo, G., → Magri, F., et al. **115**, 457 (1988)

Tóth, B., → Szász, D. **111**, 41 (1987)

Trubowitz, E., → Guillot, J.C., et al. **116**, 401 (1988)

Tsuchiya, A., → Kawamoto, N., et al. **116**, 247 (1988)

Turbiner, A.V.: Quasi-Exactly-Solvable Problems and $sl(2)$ Algebra **118**, 467 (1988)

U

Uhlmann, G., → Nachman, A., et al. **115**, 595 (1988)

Ushiroya, N., → Kotani, S. **115**, 247 (1988)

V

Vafa, C., → Alvarez-Gaumé, L., et al. **112**, 503 (1987)

Vafa, C., → Freed, D.S. **117**, 349 (1988)

Varadhan, S.R.S., → Guo, M.Z., et al. **118**, 31 (1988)

Vega, H.J. de: Non-Linear Multi-Plane Wave Solutions of Self-Dual Yang-Mills Theory **116**, 659 (1988)

Verbeure, A., → Fannes, M., et al. **114**, 537 (1988)

Verlinde, E., → Dijkgraaf, R., et al. **115**, 649 (1988)

Verlinde, H., → Dijkgraaf, R., et al. **115**, 649 (1988)

Vogl, P., → Gesztesy, F., et al. **118**, 597 (1988)

- Voorhees, B.: Predecessor States for Certain Cellular Automata Evolutions **117**, 431 (1988)
 Voronov, A.A., → Rosly, A.A., et al. **119**, 129 (1988)
 Voronov, A.A., → Rosly, A.A., et al. **120**, 437 (1989)

W

- Wadati, M., → Akutsu, Ya. **117**, 243 (1988)
 Warner, N.P., → Pilch, K. **115**, 191 (1988)
 Watanabe, H., → Hattori, K., et al. **115**, 31 (1988)
 Waterson, G., → Goddard, P., et al. **112**, 591 (1987)
 Weikard, R., → Siedentop, H. **112**, 471 (1987)
 Weisberger, W.I.: Conformal Invariants for Determinants of Laplacians on Riemann Surfaces **112**, 633 (1987)
 Weitsman, J., → Jaffe, A., et al. **112**, 75 (1987)
 Weitsman, J., → Jaffe, A., et al. **114**, 147 (1988)
 West, P., → Neveu, A. **114**, 613 (1988)
 West, P., → Neveu, A. **119**, 585 (1988)
 Wieczerkowski, C.: Symanzik's Improved Actions from the Viewpoint of the Renormalization Group **120**, 149 (1988)
 Windey, P., → Alvarez, O., et al. **111**, 1 (1987)
 Wise, M.B., → Cline, J.M., et al. **112**, 217 (1987)
 Witten, E.: Quantum Field Theory, Grassmannians, and Algebraic Curves **113**, 529 (1988)
 Witten, E.: Coadjoint Orbits of the Virasoro Group **114**, 1 (1988)
 Witten, E.: Topological Quantum Field Theory **117**, 353 (1988)
 Witten, E.: Topological Sigma Models **118**, 411 (1988)
 Wolpert, S.A.: Asymptotics of the Spectrum and the Selberg Zeta Function on the Space of Riemann Surfaces **112**, 283 (1987)
 Woronowicz, S.L.: Compact Matrix Pseudogroups **111**, 613 (1987)
 Wreszinski, W.F., → Hemmen, J.L. van **119**, 213 (1988)

X

- Xia, J.: Geometric Invariants of the Quantum Hall Effect **119**, 29 (1988)
 Xin, Z., → Liu, T.-P. **118**, 451 (1988)

Y

- Yamada, Y., → Kawamoto, N., et al. **116**, 247 (1988)
 Yamilov, R.I., → Mikhailov, A.V., et al. **115**, 1 (1988)
 Yang, C.N.: Generalization of Sturm-Liouville Theory to a System of Ordinary Differential Equations with Dirac Type Spectrum **112**, 205 (1987)
 Yau, H.-T., → Lieb, E.H. **112**, 147 (1987)
 Yau, H.-T., → Conlon, J.G., et al. **116**, 417 (1988)
 Yau, H.-T., → Lieb, E.H. **118**, 177 (1988)
 Yau, S.-T., → Tian, G. **112**, 175 (1987)
 Yorke, J.A., → Nusse, H.E. **114**, 363 (1988)
 Yoshida, H.: Non-Integrability of the Truncated Toda Lattice Hamiltonian at Any Order **116**, 529 (1988)
 Young, L.-S., → Ledrappier, F. **117**, 529 (1988)

Z

- Zachos, C.K., → Fairlie, D.B., et al. **117**, 595 (1988)
 Zagrebnov, V.A.: Perturbations of Gibbs Semigroups **120**, 653 (1989)
 Zahradnik, M., → Koukiou, F., et al. **118**, 365 (1988)
 Zegarlinski, B., → Fröhlich, J. **112**, 553 (1987)
 Zegarlinski, B., → Fröhlich, J. **120**, 665 (1989)
 Żalys, E., → Bleher, P.M. **120**, 409 (1989)
 Zhao, Z., → Cranston, M. **112**, 613 (1987)
 Ziegler, K.: On the Mean Field Instability of a Random Model for Disordered Superconductors **120**, 177 (1988)
 Zuber, J.B., → Cappelli, A., et al. **113**, 1 (1987)