Finite nonabelian subgroups of SU(n) with analytic expressions 
for the irreducible representations and the Clebsch-Gordan coefficients, 

[2] O. Lechtenfeld, 
Systematische Behandlung von Bindungszuständen in der QED, 
Bonn University internal report (1982), in German, unpublished.

Optimised mean fields for atoms I. Mean-field methods for the description of N-fermion systems, 

Optimised mean fields for atoms II. Numerical studies, 

[5] R. Flume and O. Lechtenfeld, 
On the stochastic structure of globally supersymmetric field theories, 

[6] O. Lechtenfeld, 
Stochastic variables in N=1 supersymmetric Yang-Mills theory, 

[7] O. Lechtenfeld, 
Konstruktion der Nicolai-Abbildung in supersymmetrischen Feldtheorien, 

[8] K. Dietz and O. Lechtenfeld, 
Nicolai maps and stochastic observables from a coupling constant flow, 

[9] K. Dietz and O. Lechtenfeld, 
Ghost-free quantisation of non-abelian gauge theories 
via the Nicolai transformation of their supersymmetric extensions, 

[10] O. Lechtenfeld, W. Nahm and D.H. Tchrakian, 
Dirac equations for generalized Yang-Mills systems, 

[11] O. Lechtenfeld, 
Stochastic variables in ten dimensions?, 

[12] V.A. Kostelecký, O. Lechtenfeld, W. Lerche, S. Samuel and S. Watamura, 
A four-point amplitude for the O(16)×O(16) heterotic string, 

The six-fermion amplitude in the superstring, 

[14] V.A. Kostelecký, O. Lechtenfeld, W. Lerche, S. Samuel and S. Watamura, 
Conformal techniques, bosonization and tree-level string amplitudes, 
[15] V.A. Kostelecký and O. Lechtenfeld,
Lorentzian algebra for the superstring,
[16] V.A. Kostelecký, O. Lechtenfeld and S. Samuel,
Covariant string amplitudes on exotic topologies to one loop,
[17] O. Lechtenfeld and A.J. Parkes,
On the vanishing of the genus two superstring vacuum amplitude,
[18] O. Lechtenfeld and S. Samuel,
Covariant off-shell string amplitudes with auxiliary fields,
[19] O. Lechtenfeld,
Three-loop vanishing of the superstring cosmological constant,
[20] O. Lechtenfeld and S. Samuel,
Off-shell conformal methods for the superstring,
[21] O. Lechtenfeld and S. Samuel,
Gauge-invariant modification of Witten’s open superstring,
[22] O. Lechtenfeld,
On the finiteness of the superstring,
[23] O. Lechtenfeld and A.J. Parkes,
On covariant multi-loop superstring amplitudes,
[24] O. Lechtenfeld and W. Lerche,
On non-renormalization theorems for four-dimensional superstrings,
[25] O. Lechtenfeld,
Superconformal ghost correlations on Riemann surfaces,
[26] O. Lechtenfeld,
Factorization and modular invariance of multi-loop superstring amplitudes in the unitary gauge,
[27] M. Dine, W. Fischler, O. Lechtenfeld, J. Polchinski and B. Sakita,
Baryon number violation at high temperature in the Standard Model,
[28] O. Lechtenfeld,
High energy versus high temperature —
a Minkowskian point of view of baryon number violation in the Standard Model,
[29] O. Lechtenfeld, R. Ray and A. Ray,
Phase diagram and orthogonal polynomials in multiple-well matrix models,
[30] O. Lechtenfeld,
*Chaos in matrix models?*,
Contribution to “Quarks, Symmetries and Strings:
A Symposium in Honor of Bunji Sakita’s 60th Birthday”, New York City, 01–02 October 1990,

[31] O. Lechtenfeld,
*Eigenvalue tunneling in matrix models*,

[32] O. Lechtenfeld,
*Semiclassical approach to finite-N matrix models*,

[33] O. Lechtenfeld and C.R. Nappi,
*Dilaton gravity and no-hair theorem in two dimensions*,

[34] O. Lechtenfeld,
*Collective field theory for D=0 matrix models*,
Talk at the 27th Int. Symposium Ahrenslopp on the Theory of Elementary Particles,
Wendisch-Rietz, Germany, 07–11 Sept. 1993,

[35] S.V. Ketov, O. Lechtenfeld and A.J. Parkes,
*Twisting the N=2 string*,

[36] J. Bischoff, S.V. Ketov and O. Lechtenfeld,
*The GSO projection, BRST cohomology and picture-changing in N=2 string theory*,

[37] S.V. Ketov and O. Lechtenfeld,
*Twisting and BRST cohomology of the N=2 string*,
Talk by S.V.K. at the 20th Yamada International Colloquium on
Group Theoretical Methods in Physics, 04–09 July 1994, Toyonaka, Japan,

[38] O. Lechtenfeld and S. Samuel,
*Four-dimensional twisted group lattices*,

[39] O. Lechtenfeld and S. Samuel,
*The solution of the d-dimensional twisted group lattices*,

[40] O. Lechtenfeld,
*From N=2 fermionic strings to superstrings?*,
Talk at the 28th Int. Symposium Ahrenslopp on the Theory of Elementary Particles,
Wendisch-Rietz, Germany, 30 August – 04 Sept. 1994,

[41] O. Bechmann and O. Lechtenfeld,
*Exact black-hole solution with self-interacting scalar field*,

[42] S.V. Ketov and O. Lechtenfeld,
*The string measure and spectral flow of critical N=2 strings*,
[43] O. Lechtenfeld, hep-th/9508100
On the BRST cohomology of $N=2$ strings,
Talk at the Int. Conference “Strings ’95”, USC, 13–18 March 1995,

[44] O. Lechtenfeld, hep-th/9512189
Integration measure and spectral flow in the critical $N=2$ string,
Talk at the 29th Int. Symposium Ahrenshoop on the Theory of Elementary Particles,
Buckow, Germany, 29 August – 02 Sept. 1995,

[45] O. Lechtenfeld, hep-th/9607106
The self-dual critical $N=2$ string,
Talk at the X Intern. Conference “Problems of Quantum Field Theory”,
Alushta, Crimea, Ukraine, 13–18 May 1996,

Restoring reality for the self-dual $N=2$ string,

[47] H. Dennhardt and O. Lechtenfeld, gr-qc/9612062
Scalar deformations of Schwarzschild holes and their stability,

Path-integral quantization of the (2,2) string,

$N=2$ worldsheet instantons yield cubic self-dual Yang-Mills,

[50] Ch. Devchand and O. Lechtenfeld, hep-th/9712043
Extended self-dual Yang-Mills from the $N=2$ string,

Chiral BRST cohomology of $N=2$ strings
at arbitrary ghost and picture number,

[52] Ch. Devchand and O. Lechtenfeld, hep-th/9801117
On the self-dual geometry of $N=2$ strings,
Talk by O.L. at the 31st Int. Symposium Ahrenshoop on the Theory of Elementary Particles,
Buckow, Germany, 02–06 Sept. 1997,

[53] Ch. Devchand and O. Lechtenfeld, hep-th/9808053
String-induced Yang-Mills coupling to self-dual gravity,

[54] O. Lechtenfeld and A.S. Sorin, solv-int/9810009
Fermionic flows and tau function of the $N=(1|1)$ superconformal Toda lattice hierarchy,

Manifestly invariant actions for harmonic self-dual gauge theory, unpublished.


Nilpotent deformations of N=2 superspace,  

Noncommutative instantons in higher dimensions, vortices and topological K-cycles,  

N=4, d=1 supermultiplets from nonlinear realizations of D(2, 1; α),  

N=8 superconformal mechanics,  

[89] O. Lechtenfeld and A.S. Sorin, nlin.SI/0401029  
A note on fermionic flows of the N=(1|1) supersymmetric Toda lattice hierarchy,  

[90] O. Lechtenfeld, hep-th/0401158  
Noncommutative instantons and solitons,  
Talk at the 27th Johns Hopkins Workshop on Current Problems in Particle Theory, Göteborg, Sweden, 24–26 Aug. 2003,  
and at the 36th Int. Symposium Ahrenshoop on the Theory of Elementary Particles, Berlin-Schmöckwitz, 26–30 Aug. 2003,  

Non-anticommutative N=(1,1) Euclidean superspace,  
Talk by E.I. at JINR workshop “Supersymmetries and Quantum Symmetries”, Dubna, Russia, July 2003,  

Noncommutative moduli for multi-instantons,  

Non-anticommutative chiral singlet deformation of N=(1,1) gauge theory,  

ABC of N=8, d=1 supermultiplets,  

[95] O. Lechtenfeld, L. Mazzanti, S. Penati, A.D. Popov and L. Tamassia, hep-th/0406065  
Integrable noncommutative sine-Gordon model,  

[96] O. Lechtenfeld and A.D. Popov, hep-th/0406179  
Supertwistors and cubic string field theory for open N=2 strings,  

Non-anticommutative deformation of N=(1,1) hypermultiplets,  
[98] O. Lechtenfeld,
Noncommutative sine-Gordon model,
Talk at the XIIIth International Colloquium Integrable Systems and Quantum Groups,
Prague, 17–19 June 2004,
and at the 37th Int. Symposium Ahrensboon on the Theory of Elementary Particles,
Berlin-Schmückwitz, 23–27 Aug. 2004,

[99] A.V. Domrin, O. Lechtenfeld and S. Petersen,
Sigma-model solitons in the noncommutative plane: construction and stability analysis,

[100] T.A. Ivanova and O. Lechtenfeld,
Noncommutative instantons in 4k dimensions,

[101] C.-S. Chu and O. Lechtenfeld,
Time-space noncommutative abelian solitons,

[102] C.-S. Chu and O. Lechtenfeld,
Emergence of time from dimensional reduction in noncommutative geometry,

[103] A. De Castro, E. Ivanov, O. Lechtenfeld and L. Quevedo,
Non-singlet Q-deformation of the N=(1,1) vector multiplet in harmonic superspace,

[104] O. Lechtenfeld and C. Sämann,
Matrix models and D-branes in twistor string theory,

[105] O. Lechtenfeld,
Integrable noncommutative sine-Gordon model,
Talk at JINR workshop “Supersymmetries and Quantum Symmetries”,
Dubna, Russia, 27–31 July 2005,

[106] I. Buchbinder, E. Ivanov, O. Lechtenfeld, I. Samsonov and B. Zupnik,
Renormalizability of non-anticommutative N=(1,1) theories with singlet deformation,

[107] A. De Castro, E. Ivanov, O. Lechtenfeld and L. Quevedo,
Non-singlet Q-deformations of N=2 gauge theories,
Talk by A.D.C. at JINR workshop “Supersymmetries and Quantum Symmetries”,
Dubna, Russia, 27–31 July 2005,

[108] T.A. Ivanova and O. Lechtenfeld,
Noncommutative instantons on CP^n,

[109] O. Lechtenfeld, A.D. Popov and R.J. Szabo,
Rank two quiver gauge theory, graded connections and noncommutative vortices,

[110] M. Klawunn, O. Lechtenfeld and S. Petersen,
Moduli-space dynamics of noncommutative abelian sigma-model solitons,
[111] O. Lechtenfeld, hep-th/0605034
Noncommutative solitons,
Lectures at the Int. Sendai–Beijing Joint Workshop on Noncommutative Geometry and Physics, Sendai, Japan, 01–04 Nov. 2005,

Calogero models and nonlocal conformal transformations,

Vector-multiplet effective action in the non-anticommutative charged hypermultiplet model,

Construction of noncommutative instantons in 4k dimensions,

[115] O. Lechtenfeld and A.D. Popov, 0704.0530 [hep-th]
Noncommutative solitons in a supersymmetric chiral model in 2+1 dimensions,

[116] J. Escher, O. Lechtenfeld and Z. Yin,
Well-posedness and blow-up phenomena for the 2-component Camassa-Holm equation,

Hierarchy of N=8 mechanics models,

Quiver gauge theory and noncommutative vortices,
Talk by O.L. at the 21st Nishinomiya-Yukawa Memorial Symposium,
Nishinomiya/Kyoto, Japan, 11–15 Nov. 2006,

[119] O. Lechtenfeld, 0707.3522 [hep-th]
Supersymmetric noncommutative solitons,
Talk at “Noncommutative Spacetime Geometries” in Alessandria, Italy, 26–31 March 2007, and
“Noncommutative Geometry and Physics” in Orsay, France, 23–27 April 2007,

[120] A. Galajinsky, O. Lechtenfeld and K. Polovnikov, 0708.1075 [hep-th]
N=4 superconformal Calogero models,
JHEP 0711 (2007) 008,
and talk by O.L. at JINR workshop “Supersymmetries and Quantum Symmetries”,

[121] F. Delduc, O. Lechtenfeld and A.S. Sorin, 0708.1125 [nlin.SI]
N=2 supersymmetric unconstrained matrix GNLS hierarchies are consistent,

Quantum aspects of the noncommutative sine-Gordon model,
Gauge theory in deformed N=(1,1) superspace,

Scattering of noncommutative waves and solitons in a supersymmetric chiral model in 2+1 dimensions,

[125] O. Lechtenfeld, 0710.2074 [hep-th]
Noncommutative solitons,
Talk at the Third Mexican Meeting on Mathematical and Experimental Physics,
El Colegio Nacional in Mexico City, Mexico, 10–14 Sept. 2007,

Superfield formulation of nonlinear N=4 supermultiplets,

N=4 mechanics, WDVV equations and roots,

Non-anticommutative solitons,

N=4 superparticle and super Yang-Mills theory in USp(4) harmonic superspace,

[130] O. Lechtenfeld, 0805.3245 [hep-th]
WDVV solutions from orthocentric polytopes and Veselov systems,
in: Problems of Modern Theoretical Physics., ed. V. Epp,

Yang-Mills instantons and dyons on group manifolds,

SU(3)-equivariant quiver gauge theories and nonabelian vortices,

[133] J. Lenells and O. Lechtenfeld, 0809.0077 [nlin.SI]
On the N=2 supersymmetric Camassa-Holm and Hunter-Saxton equations,

[134] O. Lechtenfeld, 0811.0021 [hep-th]
N=4 mechanics, WDVV equations and polytopes,
Talk at the XVII International Colloquium on Integrable Systems and Quantum Symmetries,
Prague, Czech Republic, 19–21 June 2008,
and at the XXVII International Colloquium on Group Theoretical Methods in Physics,
Yerevan, Armenia, 13–19 August 2008,
Proceedings:

[135] A. Fischer and O. Lechtenfeld, 0811.1048 [hep-th]
The noncommutative sine-Gordon breather,


[151] O. Lechtenfeld and M. Maceda,  
*The noncommutative Ward metric*,  

[152] O. Lechtenfeld, A. Nersessian and V. Yeghikyan,  
*Action-angle variables for dihedral systems on the circle*,  

[153] I. Bauer, T.A. Ivanova, O. Lechtenfeld and F. Lubbe,  
*Yang-Mills instantons and dyons on homogeneous G2-manifolds*,  

[154] O. Lechtenfeld, C. Nölle and A.D. Popov,  
*Heterotic compactifications on nearly Kähler manifolds*,  

[155] O. Lechtenfeld and M. Maceda,  
*On the non-commutative CP1 model*,  
Talk by M.M. at the VIII Mexican School on Gravitation and Mathematical Physics,  
Playa del Carmen, Quintana Roo, Mexico, December 2009,  

[156] T. Hakobyan, O. Lechtenfeld, A. Nersessian and A. Saghatelian,  
*Invariants of the spherical sector in conformal mechanics*,  

[157] O. Lechtenfeld, K. Schwerdtfeger and J. Thürrigen,  
*N=4 multi-particle mechanics, WDVV equation and roots*,  
SIGMA 7 (2011) 023.

[158] S. Krivonos and O. Lechtenfeld,  
*Many-particle mechanics with D(2,1;α) superconformal symmetry*,  
JHEP 1102 (2011) 042.

[159] O. Lechtenfeld and M. Maceda,  
*The Kähler potential of the non-commutative CP1 model*,  
Talk by M.M. at the IV Mexican Meeting on Experimental and Theoretical Physics,  
Mexico City, Mexico, July 2010,  

[160] T. Ioannidou and O. Lechtenfeld,  
*Noncommutative baby skyrmions*,  
Talk by T.I. at the Workshop on Noncommutative Field Theory and Gravity,  
Corfu, Greece, 08-12 September 2010,  

[161] A.S. Haupt, T.A. Ivanova, O. Lechtenfeld and A.D. Popov,  
*Chern-Simons flows on Aloff-Wallach spaces and Spin(7)-instantons*,  

[162] O. Lechtenfeld and F. Toppan,  
*An N=8 superconformal particle in the half-plane*,  
unpublished.

[163] K.-P. Gemmer, O. Lechtenfeld, C. Nölle and A.D. Popov,  
*Yang-Mills instantons on cones and sine-cones over nearly-Kähler manifolds*,  
JHEP 1109 (2011) 103.
*Is soft breaking of BRST symmetry consistent?,*  
**JHEP** *1110* (2011) 043.

*Integrable generalizations of oscillator and Coulomb systems via action-angle variables,*  

*The spherical sector of the Calogero model as a reduced matrix model,*  

*Superconformal mechanics,*  

[168] O. Lechtenfeld, 1201.6390 [hep-th]
*Instantons and Chern-Simons flows in 6,7 and 8 dimensions,*  
Talk at JINR workshop “Supersymmetries and Quantum Symmetries”,  
Dubna, Russia, 18–23 July 2011,  

*Action-angle variables and novel superintegrable systems,*  
Talk by A.N. at JINR workshop “Supersymmetries and Quantum Symmetries”,  
Dubna, Russia, 18–23 July 2011,  

*Nearly Kähler heterotic compactifications with fermion condensates,*  

*Heterotic string plus five-brane systems with asymptotic AdS₃,*  

*Nahm equations in supersymmetric mechanics,*  
**JHEP** *1206* (2012) 147.

*Noncommutative deformation of the Ward metric,*  
Talk by O.L. at the Workshop on Noncommutative Field Theory and Gravity,  
Corfu, Greece, 04–18 September 2011,  

*Instantons on the six-sphere and twistors,*  

*$N=2$ supersymmetric $S^2 \to \mathbb{C}P^3 \to S^4$ fibration viewed as superparticle mechanics,*  
Talk by S.K. at ISQS-20, Prague, 17–23 June 2012,  

[176] O. Lechtenfeld, 1210.4587 [hep-th]
*Instantons and Chern-Simons flows in six and seven dimensions,*  
Talk at the Conference on Quantum Field Theory and Gravity ‘QFTG’12’  
Tomsk, Russia, 31 July – 04 August, 2012,  
[177] S. Fedoruk, E. Ivanov and O. Lechtenfeld,  
Gauged $\mathcal{N}=4$ supersymmetric mechanics with spin supermultiplets,  

[178] T.A. Ivanova, O. Lechtenfeld, A.D. Popov and M. Tormählen,  
Instantons in six dimensions and twistors,  

[179] E. Ivanov, O. Lechtenfeld and B. Zupnik,  
Auxiliary superfields in $\mathcal{N}=1$ supersymmetric self-dual electrodynamics,  
JHEP 1305 (2013) 133.

[180] M. Gonzales, S. Khodaee, O. Lechtenfeld and F. Toppan,  
Target duality in $\mathcal{N}=8$ superconformal mechanics and the coupling of dual pairs,  

[181] P.M. Lavrov and O. Lechtenfeld,  
Field-dependent BRST transformations in Yang-Mills theory,  

[182] P.M. Lavrov and O. Lechtenfeld,  
Gribov horizon beyond the Landau gauge,  

[183] M. Feigin, O. Lechtenfeld and A. Polychronakos,  
The quantum angular Calogero-Moser model,  
JHEP 1307 (2013) 162.

[184] A. Galajinsky and O. Lechtenfeld,  
On two-dimensional integrable models with a cubic or quartic integral of motion,  

[185] K.-P. Gemmer and O. Lechtenfeld,  
Heterotic $G_2$-manifold compactifications with fluxes and fermionic condensates,  
JHEP 1311 (2013) 182.

[186] A.V. Domrin, O. Lechtenfeld, R. Linares and M. Maceda,  
Exact BPS bound for noncommutative baby Skyrmions,  

[187] T.A. Ivanova, O. Lechtenfeld, A.D. Popov and R.J. Szabo,  
Orbifold instantons, moment maps and Yang-Mills theory with sources,  

[188] E. Ivanov, O. Lechtenfeld and B. Zupnik,  
New approach to duality-invariant nonlinear electrodynamics,  

[189] N. Kozyrev, S. Krivonos, O. Lechtenfeld and A. Nersessian,  
Higher-derivative $\mathcal{N}=4$ superparticle in three-dimensional spacetime,  

[190] A. Chatzistavrakidis, L. Jonke and O. Lechtenfeld,  
Dirac structures on nilmanifolds and coexistence of fluxes,  

[191] F. Correa, O. Lechtenfeld and M. Plyushchay,  
Nonlinear supersymmetry in the quantum Calogero model,  
[192] O. Lechtenfeld, 1312.6308 [hep-th]
On the Gribov problem in Yang–Mills theory,
Talk at JINR workshop “Supersymmetries and Quantum Symmetries”,
Dubna, Russia, 29 July – 03 August 2013,

The structure of invariants in conformal mechanics,

Instantons on sine-cones over Sasakian manifolds,

Instantons on conical half-flat 6-manifolds,
JHEP, submitted.

Order α’ heterotic domain walls with warped nearly Kähler geometry,
JHEP, submitted.

Superintegrability of (generalized) Calogero models with oscillator or Coulomb potential,

[198] K. Anagnostopoulos, O. Lechtenfeld, D. Lüst, H. Kawai, J. Nishimura, H. Steinacker, R. Szabo,
S. Watamura, G. Zoupanos (eds.),
Workshop on Noncommutative Field Theory and Gravity (CORFU2013-NC),
Proceedings of the Workshop in Corfu, Greece, 08–15 September 2013,