A Template for highlighting of Publications during 2004-2008
Request to Bulgarian Research Institutes within the framework of the ESF-ALLEA Evaluation Exercise of the
Bulgarian Academy of Sciences
Revision: 20 May 2009

To further facilitate the work of the members of the Panels of Expert, it is requested that the institutes provide additional/complementary information about the list of publications they have included in their Self Evaluation Reports. It is requested that the information outlined below be prepared and submitted to the ESF before **Wednesday 3rd of June 2009** such that the panel can use the information at their meeting of 11 and 12 June.   The period covered is 2004-2008. Information on the following three categories are requested with Templates provided in the following pages:

1- Selected publications with major contributions (Books, Journals, Peer Reviewed Conference Proceedings)
2- Lists of papers registered in SCI (Science Citation Index) or not included in SCI but having Impact Factor. In the case of Humanities, list of papers in Journals listed within the European Reference Index for the Humanities (ERIH). The papers should be grouped as follows:
   a- International
   b- National (other than Bulgarian)
   c- Bulgarian.
   Such lists should be given for each section/department/laboratory separately according to the Organization chart of the Research unit.
3- List of monographs and publications in conference proceedings (distinguish: keynote; invited; peer-reviewed).
   Such lists should be given for each section/department/laboratory separately according to the Organization chart of the Research unit.

1- Selected publications with major contributions

Please provide the list of your top "X" publications over the last 5 years according to the following formula:

X=10: For Research Units with 100 or less research scientists (averaged over the period)

X = N/10: With N=number of research scientists in the institute

If possible, indicate the Impact Factor for the Journals in which the Top publications

List of Selected Major Publications over the last 5 years (2004-2008) Laboratory "Theory of Elementary Particles"				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor (if available)
Membrane solutions in M-theory	P. Bozhilov	P. Bozhilov	**JHEP 0508:087,2005**	5.944
Longitudinal Polarized Parton Densities Updated	E. Leader, A. V. Sidorov	D. B. Stamenov	Phys. Rev. **D 73** (2006) 034023	4.696
CP violation in charged Higgs decays in the MSSM	E. Christova, H. Ebert, E. Ginina,	E. Christova, E. Ginina,	JHEP 0702:075, 2007.	5.659

Variable-Tension Lightlike Brane as a Gravitational Source of Traversable Misner-Wheeler-Type Wormholes.	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	Phys. Lett. B673 (2009) 288-292 (arxiv:0811.2882[hep-th])	5.043
Non-rational 2d quantum gravity: I. World sheet CFT	**I.K. Kostov, V.B. Petkova,**	**V.B. Petkova,**	Nucl. Phys. **B 770** [FS] (2007) 273-331.	4.645
Non-rational 2d quantum gravity: IITarget space CFT	**I.K. Kostov, V.B. Petkova,**	**V.B. Petkova,**	Nucl. Phys. **B 769** [FS] (2007) 175-216.	4.645
Partial wave expansion and Wightman positivity in conformal field theory	N.M. Nikolov, K.-H. Rehren, I.T. Todorov	N.M. Nikolov, I.T. Todorov	Nucl.Phys. B722 (2005) 266-296	4,645
Purely electromagnetic spacetimes	B.Ivanov	B.Ivanov	**Phys.Rev.D 77 (2008) 044007**	4,696

2- Lists of papers registered in SCI (Science Citation Index) or not included in SCI but having Impact Factor. In the case of Humanities, list of papers in Journals listed within the European Reference Index for the Humanities (ERIH). The papers should be grouped as follows:
a- International
b- National (other than Bulgarian),
c- Bulgarian
Such lists should be given for each section/department/laboratory separately according to the Organization chart of the Research unit.

List of papers in SCI or in ERIH for Humanities *(Section/Department/Laboratory-"Theory of Elementary Particles")*				
Title	Author, or all Co-Authors	Author or co-Authors Affiliated with the BAS Institute	Books/Journals/Proceedings	Impact Factor
a- International Journals with Impact Factor or in ERIH				
Weyl-Conformally Invariant Light-Like p-Brane Theories: New Aspects in Black Hole Physics and Kaluza-Klein Dynamics	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	Phys. Rev. D72 (2005) 086011	4.696
Weyl-Invariant Lightlike Branes and Soldering of Black Hole Space-Times	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	Forschritte der Physik 55 (2007) 579-584	1.413
"Mass Inflation" With Lightlike Branes	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	Centr. Europ. Journ. Phys. 7 (2009) no.4 (arxiv:0711.2877[hep-th])	0.811
Variable-Tension Lightlike Brane as a Gravitational Source of Traversable	E.Guendelman, A.Kaganovich, E.Nissimov	E.Nissimov S.Pacheva	Phys. Lett. B673 (2009) 288-292 (arxiv:0811.2882[hep-th])	5.043

Misner-Wheeler-Type Wormholes.	S.Pacheva			
Vertex algebras and conformal field theory in four dimensions	I.T. Todorov	I.T. Todorov	Fortschr. d. Physik **54** (2006) 496-504	1,413
Infinite dimensional Lie algebras in 4D conformal field theory	I.T. Todorov	I.T. Todorov	Internat. J. Geom. Methods in Mod. Physics **5** (2008) 1361-1371	0,662
Zero modes of the SU(2)$_k$ Wess-Zumino-Novikov-Witten model in Euler angles parametrization	L. Atanasova, P. Furlan, L. Hadjiivanov	L. Hadjiivanov	J. Phys. **A37** (2004) 5329-5339	1,68
Zero modes' fusion ring and braid group representations of the extended chiral su(2) WZNW model	P. Furlan, L.Hadjiivanov, I. Todorov	L. Hadjiivanov, I. Todorov	Lett. Math. Phys. **82** (2007) 117-151	1,044
On the classical string solutions and string / field theory duality 2.	D. Aleksandrova, P. Bozhilov	P. Bozhilov	**Int.J.Mod.Phys.A19:4475-4502,2004**	1.054
Membrane solutions in M-theory	P. Bozhilov	P. Bozhilov	**JHEP 0508:087,2005**	5.944
Exact rotating membrane solutions on a G(2) manifold and their semiclassical limits	P. Bozhilov	P. Bozhilov	**JHEP 0603:001,2006**	5.393
Rotating strings and D2-	P. Bozhilov	P. Bozhilov	**JHEP 0608:029,2006**	5.393

branes in type IIA reduction of M-theory on G(2) manifold and their semiclassical limits				
Magnon-like dispersion relation from M-theory	P. Bozhilov, R.C. Rashkov	P. Bozhilov	**Nucl.Phys.B768:193-208,2007**	4.645
Neumann and Neumann-Rosochatius integrable systems from membranes on AdS(4) x S7**	P. Bozhilov	P. Bozhilov	**JHEP 0708:073,2007**	5.659
Spin chain from membrane and the Neumann-Rosochatius integrable system	P. Bozhilov	P. Bozhilov	**Phys.Rev.D76:106003,2007**	4.696
On the multi-spin magnon and spike solutions from membranes	P. Bozhilov, R.C. Rashkov	P. Bozhilov	**Nucl.Phys.B794:429-441,2008**	4.645
Integrable systems from membranes on AdS(4) x S7**	P. Bozhilov	P. Bozhilov	**Fortsch.Phys.56:373-379,2008**	1.413
Finite-size Effects for Single Spike	Changrim Ahn, P. Bozhilov	P. Bozhilov	**JHEP 0807:105,2008**	5.659
Finite-size effects of Membranes on AdS(4) x S7**	Changrim Ahn, P. Bozhilov	P. Bozhilov	**JHEP 0808:054,2008**	5.659
Neumann-Rosochatius	Changrim Ahn,	P. Bozhilov	**JHEP 0809:017,2008**	5.659

integrable system for strings on AdS(4) x CP**3	P. Bozhilov, R.C. Rashkov			
M2-brane Perspective on N=6 Super Chern-Simons Theory at Level k	Changrim Ahn, P. Bozhilov	P. Bozhilov	**JHEP 0812:049,2008**	5.659
Chiral persistent currents and magnetic susceptibilities in the parafermion quantum Hall states in the second Landau level with Aharonov–Bohm flux	L. S. Georgiev	L. S. Georgiev	Phys. Rev. B 69 (2004) 085305	3.172
Coulomb blockade in hierarchical quantum Hall droplets	A. Cappelli, L. S. Georgiev, and G. R. Zemba	L. S. Georgiev	J. Phys. A: Math. Theor. 42 (2009) 222001, arXiv:0902.1445.	1.68
Magnetic moment oscillations in a quantum Hall ring	L. S. Georgiev and M. R. Geller	L. S. Georgiev	Phys. Rev. B 70 (2004) 155304	3.172
The Role of Higher Twists in Determining Polarized Parton Densities in the Nucleon	E. Leader, A. V. Sidorov D. B. Stamenov	D. B. Stamenov	Particles and Nuclei, Lett. v.**1**, N 5 (2004) 7	ISSN 1814-5957
The Role of Higher Twist in QCD Fits to polarized DIS	E. Leader, A. V.	D. B. Stamenov	Phys. Part. Nucl. **35** (2004) S38	0.561

data	Sidorov D. B. Stamenov			
Role of Positivity Constraints in Determining Polarized Parton Densities.	E. Leader, A. V. Sidorov D. B. Stamenov	D. B. Stamenov	JHEP **06** (2005) 033	5.659
Longitudinal Polarized Parton Densities Updated	E. Leader, A. V. Sidorov D. B. Stamenov	D. B. Stamenov	Phys. Rev. **D 73** (2006) 034023	4.696
Target Mass Effects in Polarized Deep Inelastic Scattering	A. V. Sidorov D. B. Stamenov	D. B. Stamenov	Mod. Phys. Lett. **A 21** (2006) 1991	1.455
Impact of CLAS and COMPASS data on Polarized Parton Densities and Higher Twist	E. Leader, A. V. Sidorov D. B. Stamenov	D. B. Stamenov	Phys. Rev. **D 75** (2007) 074027	4.696
Recent results on Polarized PDFs and Higher Twist	E. Leader, A. V. Sidorov D. B.	D. B. Stamenov	Eur. Phys. J. Special Topics **162** (2008) 19 ISSN: 1951-6355	ISSN 1951-6355

	Stamenov			
Triple product correlations in top squark decays	A. Bartl, E. Christova, K. Hohenwarter -Sodek, T. Kernreiter	E. Christova	Phys.Rev. **D70**:095007,2004	4.696
CP asymmetries in scalar bottom quark decays	A. Bartl, E. Christova, K. Hohenwarter -Sodek, T. Kernreiter	E. Christova	JHEP 0611:076,2006	5.659
On Kaon production in e+ e- and Semi-inclusive DIS reactions	E. Christova, E. Leader	E. Christova	Eur.Phys. J. **C51**:825-831,2007	3.255
CP violation in charged Higgs decays in the MSSM	E. Christova, H. Ebert, E. Ginina,	E. Christova, E. Ginina,	JHEP 0702:075, 2007.	5.659
q-Conformal Invariant Equations and q-Plane Wave Solutions	**V.K. Dobrev, S.T. Petrov**	**V.K. Dobrev, S.T. Petrov**	J. Math. Phys. **45** (2004) 3788-3799	1.137
On the Unitarity of D=9,10,11 Conformal Supersymmetry	**V.K. Dobrev**, A.M. Miteva, R.B. Zhang,	**V.K. Dobrev B.S. Zlatev**	Czech. J. Phys. **54** (2004) 1249-1256.	0.423

	B.S. Zlatev			
Revisiting the Quantum Group Symmetry of Diatomic Molecules	M.N. Angelova, **V.K. Dobrev,** A. Frank,	**V.K. Dobrev,**	Eur. Phys. J. **D 31** (2004) 27-37.	1.828
Positive Energy Unitary Irreducible Representations of the Superalgebras $osp(1|2n,R)$,	**V.K. Dobrev**, R.B. Zhang,	**V.K. Dobrev,**	Phys. Atom. Nuclei, **68** (2005) 1660-1669;	0.515
Invariant Differential Operators and Characters of the AdS_4 Algebra,	**V.K. Dobrev**,	**V.K. Dobrev,**	J. Phys. **A39** (2006) 5995-6020	1.68
Exotic Bialgebra S03: Representations, Baxterisation and Applications,	D.Arnaudon, A. Chakrabarti, V.K. Dobrev S.G. Mihov,	V.K. Dobrev, S.G. Mihov	Annales Henri Poincare, **7** (2006) 1351-73,	1.289
Decompositions of superfields in D=4 conformal SUSY,	**V.K. Dobrev**,	**V.K. Dobrev,**	Czech. J. Phys. **56** (2006) 1131-6.	0.423
Characters of the Positive Energy UIRs of D=4 Conformal Supersymmetry,	**V.K. Dobrev**,	**V.K. Dobrev,**	Phys. Part. Nucl. **38** (2007) 564-609	0.561
On a "New" Deformation of GL(2),	A. Chakrabarti, V.K. Dobrev S.G. Mihov,	V.K. Dobrev, S.G. Mihov	Eur. Phys. J. **B 58** (2007) 135-136,	1.356

Higher Dimensional Unitary Braid Matrices: Construction, Associated Structures and Entanglements,	B. Abdesselam, A. Chakrabarti, V.K. Dobrev, S.G. Mihov,	V.K. Dobrev, S.G. Mihov	J. Math. Phys. **48** (2007) 053508	1.137
Higher Dimensional Multiparameter Unitary and Nonunitary Braid Matrices: Even Dimensions,	B. Abdesselam, A. Chakrabarti, V.K. Dobrev, S.G. Mihov,	V.K. Dobrev, S.G. Mihov	J. Math. Phys. **48** (2007) 103505	1.137
Invariant Differential Operators for Non-Compact Lie Groups: Parabolic Subalgebras	**V.K. Dobrev,**	**V.K. Dobrev,**	Rev. Math. Phys. **20** (2008) 407-449	1.386
Positive Energy Representations, Holomorphic Discrete Series and Finite-Dimensional Irreps,	**V.K. Dobrev,**	**V.K. Dobrev,**	J. Phys. A: Math. Theor. **41** (2008) 425206	1.68
q-Plane Wave Solutions of q-Weyl gravity,	V.K. Dobrev, S.G. Mihov	V.K. Dobrev, S.G. Mihov	Phys. Atomic Nuclei. **71** (2008) 862-867;	0.515
Non-rational 2d quantum gravity: I. World sheet CFT	**I.K. Kostov, V.B. Petkova,**	**V.B. Petkova,**	Nucl. Phys. **B 770** [FS] (2007) 273-331.	4.645

Non-rational 2d quantum gravity: II. Target space CFT	**I.K. Kostov, V.B. Petkova,**	**V.B. Petkova,**	Nucl. Phys. **B 769** [FS] (2007) 175-216.	4.645
Bulk correlation functions in 2D quantum gravity	**I.K. Kostov, V.B. Petkova,**	**V.B. Petkova,**	Theor.Math. Phys. **146** (2006) 108-118.	0.796
A classification of generalized quantum statistics associated with the exceptional Lie (super)algebras	N.I. Stoilova and J. Van der Jeugt	N.I. Stoilova	J. Math. Phys. **48**, 043504 (2007) (18 pages)	1.018
The paraboson Fock space and unitary irreducible representations of the Lie superalgebra osp(1|2n	S. Lievens , N.I. Stoilova and J. Van der Jeugt	N.I. Stoilova	**Commun. Math. Phys. 281** , 805-826 (2008), **ISSN** 0010-3616 (Print)	2.077
Harmonic oscillator chains as Wigner Quantum Systems: periodic and fixed wall boundary conditions in gl(1|n) solutions	S. Lievens , N.I. Stoilova and J. Van der Jeugt	N.I. Stoilova	**J. Math. Phys. 49** , 073502 (22 pages) (2008), Print + Online: **ISSN** 0022-2488	1.018
The parafermion Fock space and explicit so(2n+1) representations.	N.I. Stoilova and J. Van der Jeugt	N.I. Stoilova	**J. Phys. A: Math. Theor. 41** 075202 (13 pp), (2008), **ISSN** 1751-8113 (Print), **ISSN** 1751-8121 (Online), **IF**	1.680

			1.680.	
On the eigenvalue problem for arbitrary odd elements of the Lie superalgebra gl(1|n) and applications,	S. Lievens , N.I. Stoilova and J. Van der Jeugt	N.I. Stoilova	**J. Phys. A: Math. Theor. 40 3869-3888, (2007)**	1.680
Real Hamiltonian forms of Hamiltonian systems	V.S.Gerdjikov, A.Kyuldjiev G.Marmo, G.Vilasi	V.S.Gerdjikov, A.Kyuldjiev	**Eur. Phys. J. B 38 (2004) 635 – 649**	1.356
Results on balanced products of the distributions x±a in Colombeau algebra G (R).	B.Damyanov	B.Damyanov.	**Integral Transform. Spec. Funct. 17 (2006), 9, 623 – 635.**	0.322
Dimensional reduction of Dirac operator	P.Nikolov, G. Ruseva	G. Ruseva	**Journal of Mathematical Physics 220607, Volume 47, Issue 7. 2006.**	1.137
Finite supersymmetry transformations	N. Ilieva, H.Narnhofer, W. Thirring	N. Ilieva	**Eur. Phys. J. C35 (2004) 119–127**	3.486
Supersymmetric models for fermions on a lattice	N. Ilieva, H.Narnhofer, W. Thirring	N. Ilieva	**Fortschr. Phys. 54 (2006) 124{138**	1.413
Hopf structure and Green ansatz of deformed parastatistics algebras	B.Aneva ,T.Popov	B.Aneva ,T.Popov	**J.Phys.A 38 (2005), 6473**	1,68

Exact solvability of open stochastic systems	B.Aneva	B.Aneva	**Czech.J.Phys.v.56 (2006), 1075**	0,423
Hidden symmetries of stochastic models	B.Aneva	B.Aneva	**SIGMA 3, (2007) 068**	
Boundary Algebra and Exact Solvability of the Asymmetric Exclusion Process	B.Aneva	B.Aneva	**JNMP, v.15, supp.3 (2008) 22**	0,437
Matrix product anszatz as a tridiagonal algebra	B.Aneva	B.Aneva	**J.Phys A40, (2007) 11677**	1,68
From quantum affine symmetry to boundary Askey-Wilson algebra and reflection equation	B.Aneva	B.Aneva	**J.Phys A41, (2008) 135201**	1,68
Exact solvability of a model of a nonequilibrium physics	B.Aneva	B.Aneva	**FdPh, v.56, No.4-5 (2008)**	1,413
Triadiagonal Symmetries of Models of Nonequilibrium Physics	B.Aneva	B.Aneva	**SIGMA 4, (2008) 056**	
Purely electromagnetic spacetimes	B.Ivanov	B.Ivanov	**Phys.Rev.D 77 (2008) 044007**	4,696
No news for Kerr-Schild fields	B.Ivanov	B.Ivanov	**Phys.Rev.D 71 (2005) 044012**	4,852

Complex Shape Rotational Spectra'Effects in Nuclear	N. Minkov, S. Drenska, P. Yotov and W. Scheid,	N. Minkov, P. Yotov, S. Drenska	Physics of Atomic Nuclei, 67, 9, 1787 (**2004**).	0.515
Parity shift and beat staggering structure of octupole bands in a collective model for quadrupole_octupole deformed	N. Minkov, P. Yotov, S. Drenska and W. Scheid	N. Minkov, P. Yotov, S. Drenska	J. Phys. G: Nucl. Part. Phys. 32, 497-509 (**2006**)	3.485
Nuclear collective motion with a coherent coupling interaction between quadrupole and octupole modes	N. Minkov, P. Yotov, S. Drenska, W. Scheid, D. Bonatsos, D. Lenis and D. Petrellis,	N. Minkov, P. Yotov, S. Drenska	Phys. Rev. C, 73, 044315 (**2006**);	3.302
Coherent quadrupole-octupole modes and split parity-doublet spectra in odd-A nuclei	N. Minkov, S. Drenska, P. Yotov, S. Lalkovski, D. Bonatsos, W. Scheid,	N. Minkov, P. Yotov, S. Drenska	Phys. Rev.C, 76,034324 (**2007**);	3.302

Collective states of odd nuclei in a model with quadrupole--octupole degrees of freedom	N. Minkov, S. Drenska, P. Yotov, D. Bonatsos and W.Scheid	N. Minkov, P. Yotov, S. Drenska	Physics of Atomic Nuclei (Yadernaya Fizika) {\bf 70}, 1470–1475 (2007).	0.515
Parastatistics Algebra, Young Tableaux and the Super Plactic Monoid.	J.-L. Loday, T. Popov	T. Popov	International Journal of Geometric Methods in Modern Physics 5 (2008), 1295-1314	0,662
Cremmer-Gervais Quantum Lie Algebra.	O. Ogievetsky, T. Popov	T. Popov	Fortschritte der Physik 57, No. 5 – 7, 654 – 658 (2009)	1,43
R-matrices in Rime.	O. Ogievetsky, T. Popov	T. Popov	Accepted in Advances in Theoretical and Mathematical Physics.	
Automorphismes des alg_ebres cubiques.	T. Popov	T. Popov	C. R. Acad. Sci. Paris, Ser. I 338 (2004), 591-594	0,35
Conformal invariance and rationality in an even dimensional quantum field theory	N.M. Nikolov, I.T. Todorov	N.M. Nikolov, I.T. Todorov	Int. J. Mod. Phys A19 (2004) 3605-3636	0,764
Vertex algebras in higher dimensions and globally conformal invariant quantum field theory	N.M. Nikolov	N.M. Nikolov	Commun. Math. Phys., 253 (2005) 283-322	2,07
Elliptic Thermal Correlation Functions and Modular Forms in a Globally Conformal Invariant QFT	N.M. Nikolov, I.T. Todorov	N.M. Nikolov, I.T. Todorov	Rev. Math. Phys. 17 (2005) 613-667	1,386

Partial wave expansion and Wightman positivity in conformal field theory	N.M. Nikolov, K.-H. Rehren, I.T. Todorov	N.M. Nikolov, I.T. Todorov	Nucl.Phys. B722 (2005) 266-296	4,645
Jacobi Identity for Vertex Algebras in Higher Dimensions	B. Bakalov, N.M. Nikolov	N.M. Nikolov	J.Math.Phys. 47 (2006) 05350	1,137
Unitary Positive-Energy Representations of Scalar Bilocal Quantum Fields	B. Bakalov, N.M. Nikolov, K.-H. Rehren, I.T. Todorov	N.M. Nikolov, I.T. Todorov	Commun.Math.Phys. 271 (2007) 223-246	2,07
Infinite dimensional Lie algebras in 4D conformal quantum field theory	B. Bakalov, N.M. Nikolov, K.-H. Rehren, I.T. Todorov	N.M. Nikolov, I.T. Todorov	J. Phys. A (Mathematical and General) 41:19 (2008) 194002	1,68
A method for energy estimation and mass composition determination of primary cosmic rays at Chacaltaya observation level based on the atmospheric Cherenkov light technique	S.Cht. Mavrodiev, A.L.Mishev, J.N.Stamenov	S.Cht. Mavrodiev, A.L.Mishev, J.N.Stamenov	Nucl. Instr. & Methods in Phys. Research A 530 359-366, (**2004**)	1.114
Ground based gamma ray studies based on atmospheric Cherenkov technique at high	Mishev, S. Mavrodiev, J. Stamenov	Mishev, S. Mavrodiev, J. Stamenov	Int. Journal of Modern Physics A, v. 20, N 29, 7016-7019, **2005**	0.764

mountain altitude				
Dinamical symmetries of semi-linear Schrodinger and diffusion equations	S. Stoimenov, M. Henkel	S. Stoimenov	Nucl. Phys. B723 (2005) 205-233	5.819
Local scale-invariance in bosonic contact and pair-contact processis	F. Baumann, S. Stoimenov, M.Henkel	S. Stoimenov	J. Phys. A: Math. Gen. 39 (2006) 40063	1.68

b- National (non-Bulgarian) Journals with Impact Factor or in ERIH				
Balanced Colombeau products of the distributions x_+^p in and x^{-p}.	B.Damyanov	B.Damyanov.	Czechoslovak Math. Journal, 55 (130) (2005), 189--201.	0.155
The Role of Higher Twists in Determining Polarized Parton Densities	E. Leader, A.V. Sidorov D. Stamenov	D. B. Stamenov	Czech. J. Phys. 54 (2004) Suppl. B, 21	0.423
Higher Twist Analysis of the Nucleon g1 Structure Function	E. Leader, A.V. Sidorov D. Stamenov	D. B. Stamenov	Czech. J. Phys. 55 (2005) A219	0.423
Impact of Higher Twist and Positivity Constraints on Determination of Polarized Parton Densities	E. Leader, A.V. Sidorov D. Stamenov	D. B. Stamenov	Czech. J. Phys. 56 (2006) Suppl. C, p. C143	0.423

3- **List of monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed)**
Such lists should be given for each section/department/laboratory separately according to the Organization chart of the Research unit.

Monographs and publications in conference proceedings (distinguish: keynote; invited; peer reviewed) *(Section/Department/Laboratory-"………………………")*			
Title	Author, or all Co-Authors as appear on the publication	Author or co-Authors from the Institute	Books/ Proceedings/ **distinguish: keynote; invited; peer reviewed**
Impact of Dynamical Tensions in Modified String and Brane Theories	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	"Lie Theory and Its Applications in Physics , pp.241-252, V. Dobrev, H. Doebner et.al. eds., World Scientific, 2004 invited, peer reviewed
Weyl-Invariant Light-Like Branes and Black Hole Physics	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	hep-th/0409078 "Integrable Models and Applications: From Strings to Condensed Matter", Annual workshop of EC FP5 Network "EUCLID", Sozopol (BG), Sept. 2004 invited

Novel Aspects in p-Brane Theories: Weyl-Invariant Light-Like Branes	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	"Second Workshop on Gravity, Astrophysics and Strings", Kiten, Bulgaria, pp.170-182, P. Fiziev et.al. eds., Sofia Univ. Press, 2005) invited, peer reviewed
New Physics From A Dynamical Volume Element	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	"What Comes Beyond the Standard Models", Bled Workshops in Physics Vol.5, pp.40-49, N. Borstnik, H.B. Nielsen et.al. eds., Ljubljana Univ. Press (2004) invited, peer reviewed
Weyl-Conformally Invariant p-Brane Theories	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	"Third Internat. School on Modern Math. Physics", Zlatibor (Serbia and Montenegro), pp.349-366, B.Dragovich, Z. Rakich and B. Sazdovich (eds.), Belgrade Inst. Phys. Press, 2005 invited, peer reviewed
Self-Consistent Solutions for Bulk Gravity-Matter Systems Coupled to Lightlike Branes	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	hep-th/0611022 "Fourth Summer School in Modern Mathematical Physics", Belgrade Inst. Phys., Sept. 2006 invited
Generalized Gauge Field Approach To Lightlike Branes	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	"Fourth Summer School in Modern Mathematical Physics", pp.215-228, B. Dragovich and B. Sazdovich (eds.), Belgrade Inst.Phys. Press,

			2007 invited, peer reviewed
Lightlike Braneworlds	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	"Lie Theory and Its Applications in Physics" , pp.79-88, V. Dobrev and H. Doebner eds., Heron Press (2008)
Lightlike p-Branes: Mass "Inflation" and Lightlike Braneworlds	E.Guendelman, A.Kaganovich, E.Nissimov S.Pacheva	E.Nissimov S.Pacheva	"Fifth Summer School in Modern Mathematical Physics", B. Dragovich and Z. Rakic (eds.), Belgrade Inst. Phys. Press, 2008
Constructing conformal field theory models	I.Todorov	I.Todorov	**invited**, in: Renormalization and Universality in Mathematical Physics, Proceedings of the October 2005 Fields Institute Workshop, *Fields Institute Communications* **50** (2007) 317- 344; Bures-sur-Yvette preprint IHES/P/0605
Recent progress in four-dimensional conformal field theory	I.Todorov	I.Todorov	**invited**, in: Proceedings of the 5th Mathematical Physics Meeting: Summer School and Conference in Modern Mathematical Physics (Belgrade, July 2008)
Quantum groups and braid group statistics in conformal field theory	I.Todorov	I.Todorov	**invited**, in: Lectures at Departamento de Fizica, Universidade Federal do Espirito Santo, Vitoria, E.S., Brazil; Bures-sur-Yvette preprint

			IHES/P/08/07 (94 p.)
Extended su $(2)_k$ and restricted $U_q sl(2)$	L. Hadjiivanov, P. Furlan	L. Hadjiivanov	**peer reviewed,** in: Proc. of the Workshop "Lie Theory and its Applications in Physics VII",18-24 June 2007, Varna, Bulgaria, Eds. H.-D. Doebner and V.K. Dobrev, Heron Press, Sofia 2008, pp. 151-160 (Bulg. J. Phys. **35:s1** (2008) 151-160), ISSN 1310-0157
The diagonal affine coset construction of the Zk parafermion Hall states	L. S. Georgiev	L. S. Georgiev	Proc. of the Fifth Int. Workshop "Lie Theory and its Applications in Physics", June 2003, Varna, Bulgaria,, H.-D. Doebner and V. Dobrev, eds., pp. 301–310. World Scientific, 2003
Conformal field theory description of mesoscopic phenomena in the fractional quantum Hall effect	L. S. Georgiev	L. S. Georgiev	Proc. of the Fourth International Symposium "Quantum Theory and Symmetries", August 2005, Varna, Bulgaria, V. K. Dobrev, ed., pp. 641–649. Heron Press, Sofia, 2006.
Topological quantum computation with the universal R matrix for Ising anyons	L. S. Georgiev	L. S. Georgiev	Proc. of the VII Int. Workshop "Lie Theory and its Applications in Physics", June 2007, Varna, Bulgaria,, H.-D. Doebner and V.

			Dobrev, eds., pp. 256–265. Heron Press, Sofia, 2008
Importance of Higher Twist Corrections in Polarized DIS	E. Leader, A. V. Sidorov	D. B. Stamenov	In the Proceedings of the 11th International Workshop on Deep Inelastic Scattering (DIS2003), edited by V. Kim and L. Lipatov, PNPI of RAS, St. Petersburg, 2004, pp. 790-794 (**invited**)
The Role of Higher Twists in Determining Polarized Parton Densities in the Nucleon	E. Leader, A. V. Sidorov	D. B. Stamenov	In the Proceedings of the IX Workshop on High Energy Spin Physics (Dubna-SPIN'03), edited by A.V. Efremov and O.B. Teryaev, Dubna, Russia (2004) pp. 186-194 – (**keynote**)
The Role of Higher Twists in Determining Polarized Parton Densities	E. Leader, A. V. Sidorov	D. B. Stamenov	In the Proceedings of the 12th International Workshop on Deep Inelastic Scattering (DIS2004), Strebsko Pleso, Slovakia, editors: D.Bruncko, J.Ferencei and P.Strizenec, Inst. of Exp. Phys., SAS, Kosice, 2004, **v. II** pp. 1144-1147 (**invited**)
The Role of Higher Twist in Determining Polarized Parton Densities from DIS data	E. Leader, A. V. Sidorov	D. B. Stamenov	In the Proceedings of the 16th International Spin Physics Symposium (SPIN 2004), October 10-16, Trieste, Italy (World Scientific Publishing, 2005, editors: K.

			Aulenbacher, F. Bradamante, A. Bressen, A. Martin), pp. 306-309 (**invited**)
The Effect of Positivity Constraints on Polarized Parton Densities	E. Leader, A. V. Sidorov	D. B. Stamenov	In the Proceedings of the 13th International Workshop on Deep Inelastic Scattering (DIS2005), Madison, Wisconsin, April 27 - May 1, 2005, AIP Conference Proceedings (Editors: W.H. Smith and S.R. Dasu), **vol. 792**, p. 1015 (**invited**)
Impact of Higher Twist and Positivity Constraints on Polarized Parton Densities	E. Leader, A. V. Sidorov	D. B. Stamenov	In the Proceedings of the XI Workshop on High Energy Spin Physics (Dubna-SPIN'05), Dubna, Russia, September 27-October 1, 2005 (edited by A.V. Efremov and O.B. Teryaev, Dubna, 2006, pp. 152-163) (**keynote**)
Higher Twist Effects in Polarized DIS	E. Leader, A. V. Sidorov	D. B. Stamenov	In the Proceedings of the 1st Workshop on Quark-Hadron Duality and the Transition to pQCD, Frascati, Italy, June 6 - 9, 2005 (edited by A. Fantoni, S. Liuti and O. Rondon, pp. 141-146) (**invited**)
Polarized PDFs and Higher Twist in the Light of the Recent CLAS and COMPASS Data	E. Leader, A. V. Sidorov D. B. Stamenov	D. B. Stamenov	In the Proceedings of the 15th International Workshop on Deep Inelastic Scattering and Related Subjects (DIS2007), April 16 -20,

			2007, Munich, Germany (edited by Günter Grindhammer and Kirsten Sachs, pp 541-544) (**invited**)
Progress in the Determination of Polarized PDFs and Higher Twist	E. Leader, A. V. Sidorov D. B. Stamenov	D. B. Stamenov	In the Proceedings of the XII Advanced Reasearch Workshop on High Energy Spin Physics (DSPIN'07), Dubna, Russia, September 3 - 7, 2007 (edited by A.V. Efremov and S.V. Goloskokov, Dubna, 2008, pp 151-160) (**invited**)
CP violation in associated production of charged Higgs boson and top quark at the LHC.	E. Ginina, E. Christova, H. Ebert,	E. Christova, E. Ginina,	Contributed to Prospects for Charged Higgs Discovery at Colliders (CHARGED 2008), Uppsala, Sweden, 16-19 Sep 2008 (invited speaker)
On Non-singlets in Kaon Production in Semi-inclusive DIS reactions	E. Christova, E. Leader	E. Christova,	hep-ph/0703123, in AIP Conf.Proc.915:416-419,2007. Also in *Kyoto 2006, Spin physics* 416-419 (pear reviewed)
The N-particle Wigner quantum oscillator: non-commutative coordinates and physical properties,	R.C. King, T.D. Palev, N.I. Stoilova and J. Van der Jeugt	T.D. Palev, N.I. Stoilova	Group Theoretical Methods in Physics. Institute of Physics Conference Series 185. Eds. G.S. Pogosyan, L.E. Vicent and K.B. Wolf (IOP Publishing, Bristol, 2005; ISBN 0-7503-1008-1), 545-550.

Lie algebraic generalization of quantum statistics	N.I. Stoilova and J. Van der Jeugt	N.I. Stoilova	Group Theoretical Methods in Physics. Institute of Physics Conference Series 185. Eds. G.S. Pogosyan, L.E. Vicent and K.B. Wolf (IOP Publishing, Bristol, 2005; ISBN 0-7503-1008-1), 509-514.
Lie superalgebraic framework for generalization of quantum statistics	N.I. Stoilova and J. Van der Jeugt	N.I. Stoilova	Lie Theory and Its Applications in Physics VI, Proceedings of the Sixth International Workshop, Varna, Bulgaria 15 - 21 August 2005 . Eds. H.-D. Doebner and V.K. Dobrev (Heron Press Ltd., 2006; ISBN-10: 954-580-193-X), 292-300
Algebraic generalization of quantum statistics.	N.I. Stoilova and J. Van der Jeugt	N.I. Stoilova	J. Phys: Conf. Series 128 , 012061 (13 pp), (2008), ISSN 1742-6588 (Print), ISSN 1742-6596 (Online).
A linear chain of interacting harmonic oscillators: solutions as a Wigner quantum system	S. Lievens , N.I. Stoilova and J. Van der Jeugt	N.I. Stoilova	J. Phys: Conf. Series 128 , 012028 (11 pp), (2008), ISSN 1742-6588 (Print), ISSN 1742-6596 (Online).
On superintegrability of the Manev problem and its real Hamiltonian form	V.S.Gerdjikov, A.Kyuldjiev G. Marmo, G, Vilasi	V.S.Gerdjikov, A.Kyuldjiev	"Sixth International Conference on Geometry, Integrability and Quantization", Varna; eds. I. Mladenov, A. Hirshfeld, SOFTEX,

			Sofia, pp.262-275, 2005
Superintegrability in the Manev problem and its real form dynamics	V.S.Gerdjikov, A.Kyuldjiev G. Marmo, G, Vilasi	V.S.Gerdjikov, A.Kyuldjiev	"Prof. G. Manev's Legacy in Contemporary Astronomy, Theoretical and Gravitational Physics", eds. V. Gerdjikov, M. Tsvetkov, Heron Press, Sofia, pp.155-166, 2005
Manev problem and its real form dynamics. Superintegrability and symmetry algebras	V.S.Gerdjikov, A.Kyuldjiev G. Marmo, G, Vilasi	V.S.Gerdjikov, A.Kyuldjiev	Seventh International Conference on Geometry, Integrability and Quantization, eds. I. Mladenov, M. de Leon, SOFTEX, Sofia, pp. 203-217, 2006
On the Symmetries of the Manev Problem and its Real Hamiltonian Form	V.S.Gerdjikov, A.Kyuldjiev G. Marmo, G, Vilasi	V.S.Gerdjikov, A.Kyuldjiev	Eighth International Conference on Geometry, Integrability and Quantization, June 2006, Varna; eds. I. Mladenov, M. de Leon, SOFTEX, Sofia, pp.221-233, 2007
On the Local Equivalence Between Manev and Kepler Problems	V.S.Gerdjikov, A.Kyuldjiev, V.Mioc.	V.S.Gerdjikov, A.Kyuldjiev	Exploring the Solar System and the Universe, AIP Conference Proceedings Vol. 1043, V. Mioc, C. Dumitrache, N. Popescu (Eds), pp. 133-136, 2008
On the Equivalence Between Manev and Kepler Problems	V.S.Gerdjikov, A.Kyuldjiev G. Marmo, G, Vilasi	V.S.Gerdjikov, A.Kyuldjiev	Proceedings of Ninth International Conference on Geometry, Integrability and Quantization, I. Mladenov (Ed), Sofia 2008

General notion of curvature in Catastrophe theory terms	P. Nikolov, L. Nikolova G. Ruseva	L. Nikolova G. Ruseva	Invited int. conf. Geometry, Integrability and Quantization, Varna, June, 2007.
Singularities of smooth maps and general notion of curvature	P. Nikolov, L. Nikolova G. Ruseva	L. Nikolova G. Ruseva	Invited Proceedings of 5th Mathematical Physics Meeting. Belgrad. 2008.
BCS and Witten's supersymmetric quantum mechanics as different facets of the same lattice model	N. Ilieva	N. Ilieva	Supersymmetry and Quantum Symmetries, Eds. E. Ivanov, B. Zupnik (Dubna, 2006; ISBN 5-9530-0110-X), p. 325 peer reviewed
Understanding of Interferon-gamma binding	L. Litov, P.Petkov, P.Petkov, S.Markov, N. Ilieva	N. Ilieva	Computer Science 2008/BioComputing, Part I, pp. 37-42 (Heron Press, Sofia, 2009; ISBN 978-954-580-254-6) invited
"Sp(4,R)-systematics of atomic nuclei. F-multiplets and shell structure"	S. Drenska, M. I. Ivanov, N. Minkov	S. Drenska, M. I. Ivanov, N. Minkov	Proceedings of the 26-th International Workshop on Nuclear Theory (Rila, Bulgaria), ed. S. Dimitrova, INRNE, Sofia, 2008, p. 211 – 221, ISSN: 1313-2822.
Questions on fusion rules	A. Ganchev	A. Ganchev	In: H.-D. Doebner, V. Dobrev (eds.) Proc. of Intern. Workshop on Lie Theory and Its Applications in

			Physics, Varna, 2005, pp. 54-57 (Heron Press, 2006)
Ivan Todorov, students and collaborators: Fifty Years of Mathematical Physics (1958-2008); vol 1 scientific papers	V.K. Dobrev, A. Ganchev (Eds.)		Book - Heron Press 2008
Ivan Todorov, students and collaborators: Fifty Years of Mathematical Physics (1958-2008); vol 2: lectures, expository papers, essays	V.K. Dobrev, A. Ganchev (Eds.)		Book - Heron Press 2008
Cubic Algebras and Generalized Statistics	B.Aneva	B.Aneva	Proc.BW2005 Workshop, V.Banja, 2005 FACTA UNIVERSITATIS SERIES PHYSICS, CHEMISTRY AND TECHNOLOGY, Vol. 4, No 2, 2006
Quantum groups and stochastic models	B.Aneva	B.Aneva	Proc. 7th Varna Conference on Quantization, Geometry, Integrability, Varna 2005, p.57, SOFTEX, Sofia 2005,
Symmetries of Integrability of Stochastic Models	B.Aneva	B.Aneva	Proc. Workshop NWIP, p.57, Bergen, 2005

Models of Nonequilibrium Physics and Askey-Wilson Algebra	B.Aneva	B.Aneva	Proc.SQS2007, Dubna:JINR 2008, ISBN 5-9530-0184-3, p.379
Many-body systems with a flow	B.Aneva	B.Aneva	Proc.School and Workshop on Hamiltonian systems and QFT, Calimanesti, May 2008
Askey-Wilson algebra and related spectral problem	B.Aneva	B.Aneva	Proc. Conference SIDE8, Ste.Adele, June 2008
Strong gravitational force induced by static electromagnetic fields	B.Ivanov	B.Ivanov	gr-qc/0407048 **(invited)**
On the gravitational field induced by static electromagnetic sources	B.Ivanov	B.Ivanov	gr-qc/0502047 **(invited)**
Weyl electrovacuum solutions and gauge invariance	B.Ivanov	B.Ivanov	gr-qc/0507082 **(invited)**
Parity Shift and Fine Rotation Structure in the Spectra of Nuclei with Octupole Deformations	N. Minkov, S. Drenska, P. Yotov and W. Scheid,	N. Minkov, S. Drenska, P. Yotov	Proceedings of the 23-rd International Workshop on Nuclear Theory (Rila, Bulgaria 2004)}, ed. S. Dimitrova, (Heron Press, Sofia), p. 203 (2004).
Nuclear shape dynamics in	N. Minkov, P.Yotov,	N. Minkov, S. Drenska, P.	Proceedings of the 24-th International

an angular momentum dependent potential of quadrupole and octupole deformation variables	S.Drenska,W.Scheid, D. Bonatsos,D. Lenis and D. Petrellis	Yotov	Workshop on Nuclear Theory (Rila, Bulgaria 2005)}, ed. S. Dimitrova, (Heron Press, Sofia), p. 295 (2005).
Coupling of nuclear quadrupole and octupole degrees of freedom in an angular momentum dependent potential of two deformation variables	N. Minkov, P. Yotov, S. Drenska, W. Scheid, D. Bonatsos, D. Lenis and D. Petrellis	N. Minkov, P. Yotov, S. Drenska	Proceedings of the Int. Conf. on Frontiers in Nuclear Structure, Astrophysics and Reactions (FINUSTAR), Greece (2005)}, ed. R. Julin and S. Harissopulos, (AIP Conf. roc.) p. 508 (2006)
Collective models for nuclear quadrupole--octupole degrees of freedom: fine structure effects and critical behavior	N. Minkov, P. Yotov, S. Drenska, W. Scheid, D. Bonatsos, D. Lenis and D. Petrellis	N. Minkov, P. Yotov, S. Drenska	Proceedings of the International Workshop on Symmetries and Low--Energy Phase Transitions in Nuclear-Structure Physics (Camerino, Italy 2005)}, ed. G. Lo Bianco, (Universita degli Studi di Camerino, Camerino), p. 81 (2006).
Description of parity-doublet splitting in odd-A nuclei	N. Minkov, S. Drenska, P. Yotov, S. Lalkovski, D. Bonatsos and W. Scheid	N. Minkov, P. Yotov, S. Drenska	Proceedings of the 25-th International Workshop on Nuclear Theory (Rila, Bulgaria 2006 ed. S. Dimitrova, (Dio Mira, Sofia), p. 215 (2006).
Sp(4,R)-systematics F-multiplets and shell structure .	S. Drenska, M.Ivanov, N. Minkov	S. Drenska, M.Ivanov ,N. Minkov	Proceedings of the 25-th InternationalWorkshop on Nuclear Theory (Rila, Bulgaria 2006 ed. S.

			Dimitrova, (Dio Mira, Sofia) p.211 (2007)
Parastatistics Algebras and Super Semistandard Young Tableaux.	J.-L. Loday, T. Popov	T. Popov	Proceedings of Lie Theory and its Applications in Physics, Varna, 2007, eds. H.-D. Doebner and V.K. Dobrev (Heron Press, Sofia, 2008),
On the Rime Ansatz	O. Ogievetsky, T. Popov	T. Popov	Proceedings of the International Conference "Supersymmetry and Quantum Symmetries", Dubna, 2007
Automorphisms of Regular Algebras	T. Popov	T. Popov	Proceedings of the International Workshop "Lie Theory and Its Applicatioins in Physics-VI", Varna 2005, (Vl. Dobrev ed).
Parastatistics Hopf Algebras and Deformation of the Green Ansatz	T. Popov	T. Popov	Proceedings of III Summer School in Modern Mathematical Physics, 2004, Zlatibor, (Br. Dragovic ed)
A 2h-dimensional model with Virasoro symmetry	P. Furlan, V.B. Petkova,	V.B. Petkova,	in: Proceedings of the XXIII International Conference of Differential Geometric Methods in Theoretical Physics, August 20-26, 2005, Nankai Institute of Mathematics, Tianjin, China, Nankai Tracts in Mathematics, Vol. 10 (2006) p. 200 – 209 (peer reviewed)
Boundary 3-point Liouville dressing factor for c<1	P. Furlan, V.B. Petkova,	V.B. Petkova, M. Stanishkov	preprint ESI 2060 (2008), presented at

degenerate matter,	M. Stanishkov		Workshop on Operator Algebras and Conformal Field Theory, ESI-Vienna, September 2008 (invited speaker)
Non-critical string pentagon equations	P. Furlan, V.B. Petkova, M. Stanishkov	V.B. Petkova, M. Stanishkov	in: Proceedings of the 7-th International Conference Lie Theory and Its Applications in Physics, 18-24 June 2007, Varna, eds. H.-D. Doebner et al, Heron Press, Sofia, 2008, pp. 89-98. (invited speaker)
Non-critical string pentagon equations and their solutions	P. Furlan, V.B. Petkova, M. Stanishkov	V.B. Petkova, M. Stanishkov	arXiv:0805.0134 [hep-th] accepted for publication in J. Phys. A
Exotic bialgebras: non-deformation quantum groups	D. Arnaudon, A. Chakrabarti, V.K. Dobrev, S.G. Mihov,	V.K. Dobrev, S.G. Mihov	in: Proceedings of the 5-th International Workshop "Lie Theory and Its Applications in Physics", eds. H.-D. Doebner at al (World Scientific, Singapore, 2004) pp. 392-402. (peer reviewed)
Characters of D=4 Conformal Supersymmetry,	V.K. Dobrev,	V.K. Dobrev,	in: Proceedings of the XI International Conference on Symmetry Methods in Physics, (Prague, 2004) eds. C. Burdik, O. Navratil and S. Posta (Joint Institute for Nuclear Research, Dubna, 2004;

			ISBN 5-9530-0069-3) 25 pages. (Plenary speaker)
Quantum Mechanics on the Circle through Hopf q-Deformations of the Kinematical Algebra with Possible Applications to Levy Processes	V.K. Dobrev, H.-D. Doebner and R. Twarock,	V.K. Dobrev,	in: "Quantum Probability and Infinite Dimensional Analysis", Vol. 18, Conference Proceedings: Krupp-Kolleg,,eds. M. Sch\"urmann et al (World Scientific, Singapore, 2005) pp. 153-173. (peer reviewed)
Decompositions of long superfields in D=4 conformal supersymmetry,	V.K. Dobrev,	V.K. Dobrev,	in: Proceedings of XXV Intern. Colloquium on Group Theoretical Methods in Physics (Cocoyoc, Mexico, 2004) eds. G.S. Pogosyan, L.E. Vicent and K.B. Wolf et al (Institute of Physics, Bristol, 2005) pp. 237-242. (Invited speaker)
Characters of D=4 Conformal Supersymmetry,	V.K. Dobrev,	V.K. Dobrev,	in: Proceedings of 3rd Summer School in Modern Mathematical Physics, Zlatibor, Serbia and Montenegro, 20-31.8.2004. eds. B. Dragovich et al, SFIN XVIII (A1) (Belgrade, 2005; ISBN 86-82441-17-9) pp. 309-326. (Invited speaker)
SO(3,2) Invariant Differential Operators and Equations,	V.K. Dobrev,	V.K. Dobrev,	in: Proceedings of the VI International Workshop "Lie Theory and Its Applications in Physics", Varna, 15-21.8.2005 (substructure of QTS-4), eds. H.-D. Doebner et al,

			(Heron Press, Sofia, 2006) pp. 231-248. (peer reviewed)
Intertwining operators for Schroedinger algebra in $n\geq 3$ space dimensions,	N. Aizawa, V.K. Dobrev, H.-D. Doebner S. Stoimenov	V.K. Dobrev, S. Stoimenov	in: Proceedings of the VII International Workshop "Lie Theory and Its Applications in Physics", (Varna, 2007), eds. H.-D. Doebner et al, (Heron Press, Sofia, 2008) pp. 372-399. (peer reviewed)
Characters of the Unitarizable Highest Weight Modules over the N=2 Superconformal Algebras	V.K. Dobrev,	V.K. Dobrev,	arXiv:0708.1719 [hep-th]. Invited for Modern Encyclopedia of Mathematical Physics
Representations and characters of the Virasoro algebra and N=1 super-Virasoro algebras	V.K. Dobrev,	V.K. Dobrev,	arXiv:0709.0105 [hep-th] Invited for Modern Encyclopedia of Mathematical Physics
Singular Vectors and Invariant Equations for the Schr\"odinger Algebra in $n\geq 3$~ Space Dimensions: the General Case,	V.K. Dobrev, S. Stoimenov	V.K. Dobrev, S. Stoimenov	Invited talk by VKD at XXVII Intern. Colloquium on Group Theoretical Methods in Physics, Yerevan, August 2008, to appear in the Proceedings.
Invariant Differential Operators for Non-Compact Lie Groups: the	V.K. Dobrev,	V.K. Dobrev,	arXiv:0812.2655 [math-ph], Invited Lectures at 5th Mathematical Physics Meeting: Summer School and

$E_{6(-14)}$ case,			Conference on Modern Mathematical Physics, Belgrade, July 2008 .to appear in the Proceedings.
Exceptional Lie Algebra $E_{7(-25)}$ (Multiplets and Invariant Differential Operators)	V.K. Dobrev,	V.K. Dobrev,	arXiv:0812.2690 [hep-th] J. Phys. A, accepted.
Exotic Bialgebras from 9x9 Unitary Braid Matrices,	B. Abdesselam, A. Chakrabarti, V.K. Dobrev, S.G. Mihov	V.K. Dobrev, S.G. Mihov	arXiv:0812.2143 [math.QA].
Proceedings of the V International Workshop "Lie Theory and Its Applications in Physics", Varna, 16-22.6.2003	Eds. H.-D. Doebner, V.K. Dobrev,	V.K. Dobrev,	World Scientific, Singapore, 2004, ISBN 981-238-936-9
Proceedings in 2 volumes, 4-th International Symposium \Quantum Theory and Symmetries" (Varna, Bulgaria, August 2005),	Editor V.K. Dobrev,	V.K. Dobrev,	Heron Press, Sofia, 2006, ISBN 954-580-194-8 & 954-580-195-6
Proceedings of the VI International Workshop "Lie Theory and Its Applications in Physics", Varna, August 2005	Eds. H.-D. Doebner, V.K. Dobrev,	V.K. Dobrev,	Heron Press, Sofia, 2006, ISBN 954-580-193-X
Proceedings of the VII	Eds.	V.K. Dobrev,	Heron Press, Sofia, 2008. ISBN

International Workshop "Lie Theory and Its Applications in Physics", Varna, June 2007	H.-D. Doebner, V.K. Dobrev,		978-954-580-240-9
Lectures on Elliptic Functions and Modular Forms in Conformal Field Theory	N.M. Nikolov, I.T. Todorov	N.M. Nikolov, I.T. Todorov	"Third Internat. School on Math. Physics", Zlatibor, Serbia and Montenegro, B. Dragovich et.al. eds., Belgrade Inst. Phys. Press, Belgrade, 2005; ISBN 86-82441-17-9
Infinite dimensional Lie algebras in 4D conformal quantum field theory	B. Bakalov, N.M. Nikolov, K.-H. Rehren, I.T. Todorov	N.M. Nikolov, I.T. Todorov	proceedings of "Infinite Dimensional Algebras and Quantum Integrable Systems", 23-27 July, 2007, Faro, Portugal
Ellipticity of thermal correlation functions in a globally conformal invariant QFT	N.M. Nikolov	N.M. Nikolov	Proceedings of IV. International Symposium Quantum Theory And Symmetries, ed. V.K. Dobrev, Heron Press, Sofia, 2006
Pole Structure and Biharmonic Fields in Conformal QFT in Four Dimensions	K.-H. Rehren, N.M. Nikolov, I.T. Todorov	N.M. Nikolov, I.T. Todorov	Proc. Int. Workshop "Lie Theory and Its Applications in Physics VII" (Varna, Bulgaria, June 2007), eds. V. Dobrev et.al., Heron Press, Sofia 2008 (Bulg. J. Phys. 35:s1 (2008), ISSN 1310-0157) pp.125-138
Cohomological Analysis of Renormalization on Configuration Spaces	N.M. Nikolov	N.M. Nikolov	Invited talk at 5th MATHEMATICAL PHYSICS MEETING: Summer School and Conference on Modern Mathematical

			Physics 6 - 17 July 2008 Belgrade, Serbia (arXiv:0712.2194)
On the dynamical symmetric algebra of ageing: Lie structure, representations and Appell systems	**M. Henkel, R. Schott, S. Stoimenov, J. Unterberger**	**S. Stoimenov**	Proceedings of 26-th conference "Quantum probability and Applications", Levico, Italy, February 2005.
Lie symmetries of semi-linear Schrodinger and diffusion equations	**S. Stoimenov, M.Henkel**	**S. Stoimenov**	Proceedings of the 4-th International Symposium " Quantum Theory and Symmetries", Varna, Bulgaria, August 2005.
Lie symmetries of semi-linear Schrodinger equations and applications	**S. Stoimenov, M.Henkel**	**S. Stoimenov**	Proceedings of summer school " Ageing and glass transition", Luxemburg, September, 2005.
Lie symmetries of semi-linear Schrodinger equation and applications	S. Stoimenov, M. Henkel	S. Stoimenov	J. Phys. Conf.series. 40 (2006) 144
Approximation of lateral distribution of atmospheric Cherenkov light at different observation levels. Comparison with previous results.	A. Mishev, S. Mavrodiev, J. Stamenov	A. Mishev, S. Mavrodiev, J. Stamenov	**2005**, Proc. 29 ICRC, Pune, India.

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