

CURRICULUM VITAE

Steven Duplij

PERSONAL INFORMATION

Passport name: **Stepan Douplii**
Pen/scientific name: **Steven Duplij**
Cyrillic name: Степан Анатольевич Дуплий

Address:
Mathematisches Institut
Westfälische Wilhelms-Universität
Einsteinstrasse 62
48149 Münster
Germany



E-mails: **duplijs@uni-muenster.de**
sduplij@gmail.com

Web pages: <https://ivv5hpp.uni-muenster.de/u/duplijs>
<http://homepages.spa.umn.edu/~duplij>

DEGREES

- 2002** The academic status of Senior Research Fellow is given by Higher Certifying Commission, Kiev, Ukraine
- 1999** Habilitation Thesis: "*Semigroup Methods in Supersymmetric Theories of Elementary Particles*", Bogolyubov Institute of Theoretical Physics, Kiev, Ukraine,
Doctor Habilitatus in Theoretical Physics
(Doctor of Science in Physics and Mathematics)
- 1983** Ph.D. Thesis: "*Theoretical Investigation of Hard Processes in QCD*";
- 1978-1982** Post Graduate Course in Theoretical Physics, Kharkov State University;
PhD (Candidate of Science in Physics and Mathematics); adviser M.P. Rekalov

EDUCATION

- 1994-1995** Special German Language Course, Goethe Institute, Mannheim, Germany;
Distinguished diploma
- 1974-1978** Department of Theoretical Physics, Kharkov State University;
The Distinguished Diploma in Theoretical Nuclear Physics - M.Sc.
- 1973-1976** Special English Language Course, Kharkov State University;
The Distinguished Diploma
- 1971-1973** Department of Theoretical Radiophysics, Kharkov State University

WORK EXPERIENCE

- 2016** Lecturer in Mathematics, Bochum University of Applied Sciences, Germany
2014-2016 Scientific Researcher at the Mathematisches Institut, Universität Münster, Münster, Germany
2012 Lecturer in Mathematics, Rutgers University, Piscataway, USA
2011-2012 Visiting Fulbright Scholar, Rutgers University, USA
2000-2014 Lead Senior Staff Researcher at the Nuclear Physics Laboratory, Kharkov National University, Kharkov, Ukraine
2000-now CMS collaboration, CERN, Geneva
1997-2000 Senior Staff Researcher at the Nuclear Physics Laboratory, Kharkov National University, Kharkov, Ukraine
1983-1997 Staff Researcher at the Nuclear Physics Laboratory, Kharkov State University, Kharkov, Ukraine
1992-1993 Staff Researcher at the Astronomic Observatory, Kharkov State University, Kharkov, Ukraine
1983-1992 Staff Researcher at the Nuclear Physics Laboratory, Kharkov State University, Kharkov, Ukraine
1978-1983 Half-time Researcher at the Radiophysics Laboratory, Kharkov State University, Kharkov, Ukraine

FELLOWSHIPS & GRANTS

- 2015-2016** European Research Council Grant at University of Münster (Host: J. Cuntz)
2010 Alexander von Humboldt Fellowship at University of Münster (Host: J. Cuntz)
2011-2012 Fulbright Scholar Program at the Rutgers University, Piscataway, USA (Host: G. A. Goldin)
2010 Alexander von Humboldt Fellowship at University of Münster (Host: J. Cuntz)
2008 Alexander von Humboldt Fellowship at University of Köln (Host: M. Zirnbauer)
2007 American Physical Society Travel Grant at John Hopkins University (Host: J. Bagger)
2005-2006 Alexander von Humboldt Fellowship, University of Münster (Host: J. Cuntz)
2004 Simons Foundation Travel Grant (Stony Brook, USA)
2001 Alexander von Humboldt Fellowship at Max-Planck-Institute for Dynamics and Self-Organization, Göttingen (Host: F. Müller-Hoissen)
2001 National Natural Science Foundation of China Grant at Zhejiang University, Hangzhou (Host: Fang Li)
1994-1997 Alexander von Humboldt Fellowship at the Physics Department, University of Kaiserslautern, Kaiserslautern, Germany (Host: W. Rühl)

EDITOR EXPERIENCE

- 1999-2013** Editor of *Kharkov National University Journal* (Vestnik KSU), ser. Nuclei, Particles and Fields
2013-now Editor of *East European Journal of Physics*
2018 Invited Editor at *World Scientific Publishing Co*

Editor-compiler:

- S. Duplij** (Ed.) "*Exotic Algebraic and Geometric Structures in Theoretical Physics*", Hauppauge (New York): Nova Science Publishers, 2018 (November), 408 pp.
- S. Duplij** (Ed.) "*Supersymmetry, Quantum Groups, Multigravity and Singular Theories*", Central West Publishing, Australia, 2018, 268 pp.
- S. Duplij, W. Siegel, J. Bagger** (Eds.) "*Concise Encyclopedia of Supersymmetry and Noncommutative Structures in Mathematics and Physics*"
Dordrecht-Boston-London: Kluwer Academic Publishers, 2004, 561 pp.
(Second printing Springer Science, Berlin-Heidelberg-New York, April 2005).
- S. Duplij, J. Wess** (Eds.) "*Noncommutative Structures in Mathematics and Physics*", Dordrecht-Boston-London: Kluwer Academic Publishers, 2001, 484 pp.
- S. Duplij, V. Zima** (Eds.) "*Supersymmetric Structures in Mathematics and Physics*", Kiev, UkrINTI, 2000, 262 pp.

Reviewing:

- 1998-now** *Zentralblatt Mathematik*, Karlsruhe-Berlin, Germany
- 2005-now** *Journal of Zhejiang University. Science*, Hangzhou, China
- 2007-now** AIP, Melville, USA
- 2010-now** *Reports of Mathematical Physics*, Warsaw, Poland
- 2012-now** *Advances in Mathematical Physics*, New York, USA
- 2016-now** *Modern Physics Letters A*, World Scientific, Singapore
- 2017-now** *International Journal of Modern Physics B*, World Scientific, Singapore
- 2014-now** *Advances in Applied Clifford Algebras*, Springer, Heidelberg, Germany
- 2015-now** *Hindawi Publishing Co.*, London, UK
- 2018-now** *Symmetry*, Basel, Switzerland

LECTURE COURSES

Calculus
Elementary Particle Physics
Quantum chromodynamics
Unified theories
Supersymmetry and supergravity

SUPERVISION

5 students received Distinguished M.Sc. Degree in Theoretical Physics
4 PhD students, 1 PhD defended

PROFESSIONAL MEMBERSHIPS

2014 RUSSIAN UNION OF WRITERS (Moscow, Russia)
2008 AMERICAN PHYSICAL SOCIETY (College Park, MD)
2002 ALEXANDER VON HUMBOLDT CLUB Ukraine
1995 AMERICAN MATHEMATICAL SOCIETY (Providence, RJ)

1994 INTERNATIONAL ASSOCIATION OF MATHEMATICAL PHYSICS
(Cambridge, MA)
1993 ENGLISH INTERNATIONAL ASSOCIATION (Lund, Sweden)
1993 AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
(Washington, DC)
1992 EUROPEAN PHYSICAL SOCIETY (Geneva, Switzerland)
1999 INTERNATIONAL MATHEMATICAL UNION (IAS, Princeton)

LISTED

WORLD DIRECTORY OF MATHEMATICIANS
MARQUES WHO IS WHO IN AMERICA
ENCYCLOPEDIA OF MODERN UKRAINE
MATHEMATICAL PORTAL (Math-Net)
MATHSCINET (American Mathematical Society)
ACADEMIC GENEALOGY OF THEORETICAL PHYSICISTS
MATHEMATICS GENEALOGY PROJECT
GOOGLE SCHOLAR
MICROSOFT ACADEMICS
SCOPUS

CONFERENCE ORGANIZING

2005 June-International Workshop “*Pseudo-Hermitian Hamiltonians in Quantum Physics*” as a member of Advisory Board
2000 September-NATO Advanced Research Workshop "*Noncommutative Structures in Mathematics and Physics*" as a Partner Country Co-Director
(NATO Co-Director: Julius Wess)

CONFERENCE PARTICIPATION

Participated at numerous international conferences, workshops, schools and seminars in USA, Germany, France, UK, Poland, Spain, Czech Republic, Russia, China, Ukraine.
2017 December Workshop SUPERGEOMETRY AND APPLICATIONS (Luxembourg)
2016 January Workshop BANACH METHODS IN NONCOMMUTATIVE GEOMETRY (Münster, Germany)
2015 April Workshop STRUCTURE AND CLASSIFICATION OF C*-ALGEBRAS (Münster, Germany)
2015 April Workshop STRUCTURE AND CLASSIFICATION OF C*-ALGEBRAS (Münster, Germany)
2014 May Workshop QUANTUM GROUPS AND OPERATOR ALGEBRAS (Münster, Germany)
2011 August 3rd International Conference QUANTUM ELECTRODYNAMICS AND STATISTICAL PHYSICS (Kharkov, Ukraine)
2010 June 26th Workshop FOUNDATIONS AND CONSTRUCTIVE ASPECTS OF QFT (Münster, Germany)

2010 May ANALYTIC AND ALGEBRAIC METHODS IN PHYSICS VI (Prague, Czech Republic)
2009 October ALGEBRA, GEOMETRY, AND MATHEMATICAL PHYSICS (Bedlewo, Poland)
2009 September THE FOURTH INTERNATIONAL CONFERENCE ON P-ADIC MATHEMATICAL PHYSICS (Hrodna, Belarus)
2009 June SYMMETRY IN NONLINEAR MATHEMATICAL PHYSICS (Kiev, Ukraine)
2009 May ANALYTIC AND ALGEBRAIC METHODS V (Prague, Czech Republic)
2008 December 100th STATISTICAL MECHANICS CONFERENCE (Rutgers, USA)
2008 July SUMMER SCHOOL AND CONFERENCE ON MODERN MATHEMATICAL PHYSICS (Belgrade, Serbia)
2007 May 97th STATISTICAL MECHANICS CONFERENCE (Rutgers, USA)
2004 July-August SIMONS WORKSHOP IN MATHEMATICS AND PHYSICS (Stony Brook, USA)
2001 July XV Max Born Symposium SCHROEDINGER OPERATORS, RANDOM POTENTIALS AND SINGULAR PERTURBATIONS (Wroclaw, Poland)
2000 July INTERNATIONAL CONFERENCE ON SUPERSYMMETRY AND QUANTUM FIELD THEORY 75th Birthday of D. V. Volkov (Kharkov, Ukraine)
1999 July INTERNATIONAL CONFERENCE ON SUPERSYMMETRY AND QUANTUM SYMMETRIES in the memory of V. I. Ogievetsky (Dubna, Russia)
1999 July INTERNATIONAL CONFERENCE STRINGS-99 (Potsdam, Germany)
1999 August INTERNATIONAL CONFERENCE ON QUANTUM GRAVITY AND SUPERSTRINGS (Dubna, Russia)
1998 August INTERNATIONAL CONGRESS OF MATHEMATICIANS (Berlin, Germany)
1997 January INTERNATIONAL SEMINAR ON SUPERSYMMETRY AND QUANTUM FIELD THEORY in memory of D. V. Volkov (Kharkov, Ukraine)
1996 June SUPERSYMMETRY-96 (College Park, MD)
1996 June INTERNATIONAL CONFERENCE ON HIGHER HOMOTOPY STRUCTURES IN MATHEMATICAL PHYSICS (Poughkeepsie, NY)
1995 June CRACOW SCHOOL OF THEORETICAL PHYSICS (Zakopane, Poland)
1995 July INTERNATIONAL CONFERENCE ON GAUGE THEORIES, APPLIED SUPERSYMMETRY AND QUANTUM GRAVITY (Leuven, Belgium)
1995 July EUROPEAN SCHOOL OF GROUP THEORY (Valladolid, Spain)
1994 July INTERNATIONAL CONGRESS ON MATHEMATICAL PHYSICS (Paris)
1993 June FIRST CARRIBEAN SPRING SCHOOL OF MATHEMATICS AND THEORETICAL PHYSICS (Saint-Francois, Guadeloupe)

VISITS & TALKS (outside FSU)

2018

Tianjin, China (Chern Inst. Math.)

Harbin, China (Harbin Eng. Univ.)

2017

Luxembourg (Math. Research Unit)-*N.Poncin*

2016

Jena, Germany (Inst. Math.)-*D. Lenz*

2014

Münster, Germany (Inst. Math.)-*J. Cuntz, W. Werner, R. Wulkenhaar*

Salerno, Italy (Univ. Salerno, Math. Dept.)-*C. Delizia*

2012

Hangzhou, China (Zhejiang Univ.)-*Fang Li*

Davis, USA (UC, Math. Dept.)-*M. Mulase, A. Schwarz*

Riverside, USA (UC, Math. Dept.)-*M. Lapidus*

Honolulu, USA (Univ. Hawaii, Phys. Dept.)-*X. Tata*

Syracuse, USA (Univ. Syracuse, Phys. Dept.)-*K. Wali*

Medford, USA (Tufts Univ., Inst. Cosmology)-*A. Vilenkin*

Boston, USA (NEU, Math. Dept.)-*A. Martsinkovsky*

2011

Chicago, USA (UIC, Math. Dept.)-*L. Kauffman*

Minneapolis, USA (Univ. Minnesota, Phys. Dept.)-*M. Shifman*

Philadelphia, USA (UPenn, Math. Dept.)-*J. Stasheff*

Piscataway, USA (Rutgers, Math. Dept.)-*G.A. Goldin*

Argonne, USA (ANL, HEP Division)-*C. Zachos*

New York, USA (CUNY Graduate Center, Math. Dept.)-*A. Douglas*

2010

Münster, Germany (Inst. Math.)-*J. Cuntz, W. Werner,*

Heidelberg, Germany (Inst. Theor. Phys.)-*G. Wolschin, J. Kupsch,*

Wien, Austria (ESI, Univ.)-*H. Grosse,*

Prague, Czech. Rep. (Inst. Nucl. Phys., Rez)-*M. Znojil,*

Wien, Austria (Inst. Theor. Phys., TUW)-*D. Grumiller,*

Padova, Italy (Inst. Nucl. Phys.)-*M. Tonin,*

Naples, Italy (Inst. Phys.)-*G. Esposito,*

Florence, Italy (Inst. Nucl. Phys.)-*R. Casalbuoni, L. Lusanna,*

Rome, Italy (Inst. Theor. Phys.)-*M. Bianchi*

2009

Warsaw, Poland (Inst. Math.)-*S. Woronowicz, P. Urbanski,*

Lodz, Poland (Univ.)-*B. Broda,*

Wroclaw, Poland (Inst. Theor. Phys., IFT)-*J. Lukierski,*

Zielona Gora, Poland (Inst. Phys., IF)-*M. Dudek,*

Szczecin, Poland (Inst. Phys., IF)-*M. Dabrowski,*

Krakow, Poland (Inst. Phys., IF)-*H. Arodz,*

Prague, Czech. Rep. (Inst. Math.)-*B. Burgstaller*

Potsdam, Germany (AEI)

Dresden, Germany (Forschungszentrum Dresden-Rossendorf)-*U. Günther*

2008

Piscataway, USA (Rutgers Univ.)-*G. Goldin,*

Medford, USA (Tufts Univ.)-*A. Vilenkin,*

Cambridge, USA (MIT)-*E. Lomon,*

New York, USA (CUNY)-*S. Catto,*

Köln, Germany (Inst. Theor. Phys.)-*M. Zirnbauer,*

Belgrade, Serbia (Inst. Phys., IF)-*B. Dragovich,*

Nic, Serbia (Inst. Phys.)-*M. Ciric*,
 Trieste, Italy (SISSA)-*L. Bonora*, Bielefeld, Germany (Univ.)-*C. Ringel*,
 Bonn, Germany (Phys. Inst.)-*V. Rittenberg*
2007
 Princeton, USA (Inst. Adv. Study)-*S. Adler*,
 Chicago, USA (Univ. Illinois, UIC)-*L. Kauffman*,
 Medford, USA (Tufts Univ.)-*A. Vilenkin*,
 Cambridge, USA (MIT)-*E. Lomon*,
 Baltimore, USA (John Hopkins Univ.)-*J. Bagger*,
 Philadelphia, USA (Univ. Penn.)-*J. Stasheff*
2006
 Münster, Germany (Inst. Math.)-*J. Cuntz*,
 Bielefeld, Germany (Univ.)-*C. Ringel*
2004
 Princeton, USA (Inst. Adv. Study)-*S. Adler*,
 Baltimore, USA (John Hopkins Univ.)-*J. Bagger*,
 Stony Brook, USA (SUNY, YITP)-*W. Siegel*,
 Minneapolis, USA (Inst. Theor. Phys., FTPI-UMN)-*M. Shifman*,
 Krakow, Poland (Jagellonian Univ.)
2003
 Wroclaw, Poland (Inst. Theor. Phys., IFT)-*W. Marcinek, J. Lukierski*
2001
 Göttingen, Germany (ISF)-*F. Müller-Hoissen*,
 Hangzhou, China (Zhejiang Univ.)-*F. Li*,
 Shanghai, China (Inst. Phys.)-*Y.-L. Xu*,
 Wroclaw, Poland (Inst. Theor. Phys., IFT)-*W. Marcinek, J. Lukierski*
 Prague, Czech. Rep. (CTU)-*C. Burdik*
 Rez, Czech. Rep. (Inst. Nucl. Phys., NPI)-*M. Znojil*,
 Mannheim, Germany (Univ.)-*M. Schlichenmaier*
2000
 Warsaw, Poland (Inst. Math.)-*J. Okninski*,
 Wroclaw, Poland (Inst. Theor. Phys., IFT) -*W. Marcinek, J. Lukierski*
1999 Potsdam, Germany (AI)
1998 Berlin, Germany (HMI)-*W. Von Oertzen*,
 Berlin, Germany (Tech. Univ.),
 Krakow, Poland (Inst. Nucl. Phys.)
1994-1996
 Kaiserslautern, Germany (Univ.)-*W. Rühl*
1994
 St. Andrews, UK (Univ.)-*J. Howie*
 Orsay, France (Inst. Nucl. Phys.)-*A. Comtet*
1993
 München, Germany (Max-Planck-Inst. für Physik)-*J. Wess*,
 Lyon, France (Inst. Phys.)
 Kaiserslautern, Germany (Univ.)-*W. Rühl*

PUBLICATIONS

More than 100 articles and reports including *Physical Review*, *Journal of Physics*, *Communications in Mathematical Physics*, *Journal of Mathematical Physics*, *Communications in Algebra*, *Semigroup Forum*, *Letters in Mathematical Physics*, *Theoretical and Mathematical Physics*; *Journal of Lie Theory*, *International Journal of Geometric Methods in Modern Physics*, *Linear Algebra and Applications* (full list is on homepage and arxiv.org).

Monograph: S. Duplij "*Semisupermanifolds and semigroups*", Kharkov: Krok, 2000, 220pp. (Second Print by CreateSpace Pubs.: Charleston, 2013, available from Amazon).

RESEARCH INTERESTS

Supersymmetry and semigroups; supermatrix models; superconformal symmetry; super Riemann surfaces; exotic supermanifolds; supersymmetric quantum mechanics.

Quantum groups and supergroups; weak Hopf algebras and Yang-Baxter equation; representations of quantized algebras, new actions of quantum algebras on quantum spaces; Cuntz algebras.

Polyadic algebraic structures and representations, algebras and groups, fields.

Nonlinear methods in (super)electrodynamics, Yang-Mills, gravity and multigravity.

Constrained systems and gauge theories, application to QCD and gravity.

Exactly solvable QFT models, matrix models, numerical methods.

Secondary:

Symmetries of genetic code and visualization of DNA sequences;

Helicity formalism in quantum chromodynamics;

Polarization phenomena in low energy nuclear physics;

Rutherford backscattering method in ion implantation;

Nonstationary radio noise.

SPECIAL SKILLS

Languages: English (perfect), German (speaking), Russian (native), Ukrainian (native), Italian (basic).

Programming: Perl, Mathematica, Maple, LaTeX, BibTeX, HTML.

PC platforms: MS-DOS, Windows, Unix, Linux.

PC software: Scientific Work Place, dBase, Adobe products, Microsoft Excel, Word, Photoshop, Dreamweaver, PowerPoint.

ADDITIONAL PERSONAL INFORMATION

Date and place of birth: August 29, 1954, Chernyshevsk, Russia.

Citizenship: Ukraine.

Family status: married.

MASS MEDIA & SOCIAL LIFE

TV programs and interviews at the Kharkov TV studios (regularly).

Scientific program “Logos” (regular interviews at the Central Kharkov radio station).

Articles about me: in USA (SCOOP USA, Gazette, Library of Congress); in Germany, in Ukrainian press (regularly).

Alexander von Humboldt Fellows meetings/workshops.

LITERARY & MUSICAL ACTIVITY

Writing poetry and short stories

More than 200 publications in USA/UK professional literary magazines (in English).

Poetry books - including

IN CRY (Mitez, Kharkov, 1996) bilingual English/Russian

ANGEL (1996), ALIEN (1995), DREAM (1994) (in English);

REFLEXOES 1993 (in Portuguese)

DASH-DOTTED (Cambridge, MA, 2012) bilingual English/Russian poetry
(available from Amazon).

SUPERMANIFOLD OF LIFE (Cambridge, MA, 2014) multilingual poetry and
short prose in 9 languages (available from Amazon).

Playing guitar and composing songs

CD audio albums of songs: BLITZ (Heidelberg, 1995), MOTIFS OF YEARS
(Heidelberg, 1996), SUPERMANIFOLD OF LIFE (Houston, 2007)

MC audio album of songs: BLITZ (GEMA, Berlin, 1996)

CD audio album of poems: SUPERMANIFOLD OF LIFE (Kharkov, 2004),
professional reading in English by T. Kudryashova.

Publications

by

Steven Duplij (Stepan Douplii)

Books:

1. S. Duplij (Ed.) "**Exotic Algebraic and Geometric Structures in Theoretical Physics**". - Nova Science Publishers: New York. - **2018** (November). - 408 pp.
2. S. Duplij (Ed.) "**Supersymmetry, Quantum Groups, Multigravity and Singular Theories**", Central West Publishing: Australia. - **2018**. - 268 pp.
3. S. Duplij, "**Semisupermanifolds and Semigroups**", (Second Edition). - Createspace Publishing: Charleston, USA. - **2013**, 220pp.
4. S. Duplij, W. Siegel, J. Bagger, eds, "**Concise Encyclopedia of Supersymmetry and noncommutative structures in mathematics and physics**", Kluwer Academic Publishers, Dordrecht-Boston-London. - **2004**, 561 pp. (Second printing Springer Science, Berlin-Heidelberg-New York-Tokyo, **2005**).
5. S. Duplij, and J. Wess, eds, "**Noncommutative Structures in Mathematics and Physics**". - Kluwer Academic Publishers: Dordrecht-Boston-London. - **2001**. - 493 p.
6. S.A. Duplij, "**Semisupermanifolds and semigroups**". - Krok: Kharkov. - **2000**. - 220 c.
7. S. Duplij, and V. Zima, eds, "**Supersymmetric Structures in Mathematics and Physics**". - UkrNTI: Kiev - **2000**. - 262 c.

Articles:

1. S. Duplij, "Polyadic integer numbers and finite (m,n) -fields", **p-Adic Numbers, Ultrametric Analysis, Geometry**.-2017.-V.9, No.4, p. 257-281.
2. S. Duplij, "Arity shape of polyadic algebraic structures", 2017, 43 pp., arXiv:1703.10132, **Journal of Mathematical Physics, Analysis, Geometry**, vol. **15**, issue 1, 2019.
3. S. Duplij, "A q-deformed generalization of the Hosszu-Gluskin theorem", **Filomat**.- 2016 V. 30.- №11. -P. 2985-3005.
4. S. Duplij, "Formulation of singular theories in a partial Hamiltonian formalism using a new bracket and multi-time dynamics", **International Journal of Geometric Methods in Modern Physics**. - 2015.- V.12. – № 1.- 1550001 (19 pages).
5. S. Duplij, Y. Hong, F. Li, "Uq(sl(m+1))-Module Algebra Structures on the Coordinate Algebra of a Quantum Vector Space", **Journal of Lie Theory**.- V. 25.- 2015, No. 2, 327-361.
6. M. L. Walker, S. Duplij, "Cho-Duan-Ge decomposition of QCD in the constraintless Clairaut-type formalism", **Physical Review D**.- 2015.- V. 91, 064022, 10 pp.
7. G. A. Goldin, V. M. Shtelen, S. Duplij, "Conformal symmetry transformations and nonlinear Maxwell equations", 2017, 12p. preprint arXiv:1704.00146.

8. S. Duplij, W. Werner, "Structure of unital 3-fields".- 2015.- arXiv: math.RA, 1505.04393 (Submitted to **Communications in Algebra**).
9. S. Duplij, E. Di Grezia, G. Esposito, A. Kotvytskiy, "Non-linear constitutive equations for gravitoelectromagnetism", **International Journal of Geometric Methods in Modern Physics**. - 2014.- V.11. – № 1.- 1450004 (10 pages).
10. S. A. Duplij and A. T. Kotvytskiy, "Generalized Interaction In Multigravity", **Theoretical and Mathematical Physics** - 2013. - V.177.- P. 1400-1411.
11. S. Duplij, "Generalized duality, Hamiltonian formalism and new brackets", **Journal of Mathematical Physics, Analysis, Geometry**, 2014.-V. **10**.- №2.- P. 189-220.
12. S. A. Duplij and A. T. Kotvytskiy, "Multigravity And Pauli-Fierz Model", **Journal of Kharkov National University**, ser. Nuclei, Particles and Fields. - 2013. - V. 1041.- №2(58).- P. 81–92.
13. S. A. Duplij, "Partial Hamiltonian Formalism, Multi-Time Dynamics And Singular Theories", **Journal of Kharkov National University**, ser. Nuclei, Particles and Fields. - 2013. - V. 1059.- №3(59).- P. 10–21, arXiv:1307.5771.
14. S. Duplij and G.Ch. Kurinnoj, "Representations, quivers, and their and supersymmetric generalizations", **Journal of Kharkov National University**, ser. Nuclei, Particles and Fields. - 2011. - V.969.- № 3(51).- P. 81–93.
15. S. Duplij, "Polyadic Systems, Representations And Quantum Groups", **Journal of Kharkov National University**, ser. Nuclei, Particles and Fields. - 2012. - V. 1017.- № 3(55).- P. 28–59, arXiv:1308.4060.
16. S. Duplij, S. Sinel'shchikov, "Classification of $U_q(sl_2)$ -module algebra structures on the quantum plane", **Journal of Mathematical Physics, Analysis, Geometry**, 2010.-V. **6**.- №4.- P. 21-46.
17. S. Duplij, S. Sinel'shchikov, "On $U_q(sl_2)$ -actions on the quantum plane", **Acta Polytechnica**, 2010, V. 4.- P. 21-38.
18. S. Duplij, "A new Hamiltonian formalism for singular Lagrangian theories", **Journal of Kharkov National University**, ser. Nuclei, Particles and Fields. - 2011. - V.969.- № 3(51).- P. 34–39.
19. S. Duplij, S. Sinel'shchikov, "Quantum enveloping algebras with von Neumann regular Cartan-like generators and the Pierce decomposition", **Communications in Mathematical Physics**, - 2009. - V. **287**. - № 4. - P. 769-785.
20. S. Duplij, S. Sinel'shchikov, "Quantum universal enveloping algebras with idempotents and the Pierce decomposition", **Journal of Kharkov National University**, ser. Nuclei, Particles and Fields. - 2009. - V. **845**.- № 1(41).- P. 3–15.
21. S.A. Duplij, G.A. Goldin, V.M. Shtelen, "Generalizations of nonlinear and supersymmetric classical electrodynamics", **J. Physics A: Math. and Gen.** – 2008. – V.41.- P. 304007.
22. S.A. Duplij, G.A. Goldin, V.M. Shtelen, "Nonlinear supersymmetric classical electrodynamics", **Journal of Kharkov National University**, ser. Nuclei, Particles and Fields. - 2007. - V. **781**.- № 3(35).- P. 37–47.
23. A. Yu. Berezhnoy and S. Duplij, "Dependence of nucleotide physical properties in water on their placement in codons and determinative degree", **Biophysical Bull. Kharkov Univ.** 2007. – **18**(1), 29-47.
24. S. A. Duplij and A. T. Kotvytskiy, "Coincidence limit and generalized interaction term structure in multigravity", **Journal of Kharkov National University**, ser. Nuclei, Particles and Fields. - 2007. - V. **784**, №4(36), p. 67–72.

25. S.A.Duplij, I.I.Shapoval, "Quantum computations: fundamentals and algorithms", **Problems Of Atomic Science And Technology (PAST)**.-2007.-No.3(1).-p.230-235.
26. S. A. Duplij, I. I. Shapoval, "Topological Methods In Quantum Computations", **Journal of Kharkov National University**, ser. "Nuclei, particles and fields". - 2007. - V. 781. - N 3(35). - S. 3–31.
27. S.A. Duplij, D.V. Soroka, V.A. Soroka, "A special fermionic generalization of lineal gravity", **J. Zhejiang Univ. Science**. - 2006. - V. 7A (4) 629-632.
28. A. Borowiec, W. Dudek, S. Duplij, "Bi-element representations of ternary groups", **Communications in Algebra** - 2006 - V. 34 (5), 1651-1670.
29. S. Duplij, S. Sinel'shchikov, "Quantum enveloping algebras, von Neumann regularity and the Pierce decomposition". - In Proceedings of **5th Mathematical Physics Meeting: Summer School in Modern Mathematical Physics**, 6 - 17 July 2008, Belgrade, Ed. B. Dragovich, Z. Rakic, Institute of Physics, Belgrade, 2009, p. 241-265.
30. S.A. Duplij, G.A. Goldin, V.M. Shtelen, "Conformal Inversion and Maxwell Field Invariants in Four- and Six-Dimensional Spacetimes". - In Proceedings of the XXXIInd Workshop on **Geometric Methods in Physics**, (Bialowieza, Poland, July 2013), 2014.
31. D. Duplij, S. Duplij, "Determinative degree, trianders and physical properties of nucleotides", In: Humboldt-Kolleg "**Actual Science in Ukraine: Humboldt-Club Ukraine General Assembly**", January 11-12, 2008, Kiev, p.8-10.
32. S. Duplij, *Analysis of constrained systems using the Clairaut equation*. - In Proceedings of **5th Mathematical Physics Meeting: Summer School in Modern Mathematical Physics**, 6 - 17 July 2008, Belgrade, Ed. B. Dragovich, Z. Rakic, Institute of Physics, Belgrade, 2009, p. 217-225.
33. S. Duplij, S. Sinel'shchikov, "All $U_q(sl_2)$ -actions on the quantum plane and their classical limits", **The Fourth International Conference on p-Adic Mathematical Physics** Hrodna, Belarus, Sept, 2009, p.15-16.
34. D. Duplij, S. Duplij, "Determinative degree, trianders and physical properties of nucleotides", In: Humboldt-Kolleg "**Actual Science in Ukraine: Humboldt-Club Ukraine General Assembly**", January 11-12, 2008, Kiev, p.8-10.
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6. • BFSS Model
7. • Bigravity
8. • Borchers Superalgebra
9. • BPS Preon
10. • Braided Supersymmetry
11. • Coderivation
12. • Colored Hopf Superalgebra
13. • Conformal Supergravity
14. • Conifold
15. • Coquasitriangular Structure
16. • Dehn Twist
17. • Del Pezzo Surface
18. • Dijkgraaf-Vafa Theory
19. • Doubly Supersymmetric Approach
20. • Drinfeld Twist
21. • E-String
22. • Even Rule
23. • F-Manifold
24. • Face Algebra
25. • Fano Manifold
26. • Fluxbrane
27. • Frenkel-Kac-Segal Construction
28. • Frobenius Supermanifold
29. • Gamma Matrices
30. • Generalized Superbrane Action Principle
31. • Geometric Engineering
32. • Graded Parafermion
33. • Grassmann Parity

34. • Gromov-Hausdorff Distance
35. • Gromov-Hausdorff Limit
36. • Gromov-Witten Class
37. • Hanany-Witten Construction
38. • Hecke Algebra
39. • Hodge Operator
40. • Hopf Superline
41. • Infinite-Dimensional Lie Algebra
42. • Interacting String Bit Formalism
43. • Intriligator-Leigh-Seiberg Principle
44. • Ishibashi-Kawai-Kitazawa-Tsuchiya Model
45. • Kappa Symmetry
46. • Kontsevich Cycle
47. • L-Brane
48. • Landau-Ginzburg Models
49. • Lens Space
50. • Little String Theories
51. • Manifold, of exceptional holonomy
52. • Manifold, of special holonomy
53. • Manin Triple
54. • Melvin Space
55. • Murray-Von Neumann Equivalence
56. • Nambu-Goto Action
57. • Neumann Coefficient
58. • Neveu-Schwarz-Ramond String
59. • Nicolai Mapping
60. • Nilpotent Mapping
61. • Noncommutative Determinants
62. • Noninvertible Regularization-
63. • Nonlinear Holomorphic Supersymmetry
64. • Obstructor
65. • Operad
66. • Oxidation
67. • P-Manifold
68. • Parent Action Approach
69. • Penrose Limit
70. • Phantom Field
71. • Polyakov Action
72. • Q-Manifold
73. • QP-Manifold
74. • Quantum Cartan Domain
75. • Quantum Cohomology
76. • Quantum General Linear Supergroup
77. • Quantum Groupoid
78. • Quantum Superspace
79. • Quasi-Hopf Superalgebra
80. • Quasideterminants
81. • Queer Superalgebra
82. • Regular Category
83. • Regular Coalgebra
84. • Regular Functor
85. • Regular Yang-Baxter Equation
86. • Resolution Via Transgression
87. • Reverse Geometric Engineering
88. • Satake Diagram
89. • Schouten Superalgebra
90. • Semisupermanifold
91. • Set-Theoretical Solution
92. • Shadow Multiplet
93. • Simple Supergravity
94. • Skew-Whiffing
95. • Spacelike Brane
96. • Spinors
97. • Stack
98. • Stainless Superbrane
99. • Stenzel Metric
100. • Super Elliptic Function
101. • Super Gardner Equation
102. • Super Grassmannian
103. • Super Kadomtsev-Petviashvili Hierarchy
104. • Super Loday Algebra
105. • Super Reshetikhin-Semenov-Tian-Shansky Algebra
106. • Super Schlesinger Equations
107. • Supercomplexification
108. • Superderivation
109. • Superfield, definition
110. • Superfield, $N = 1$
111. • Supergravity
112. • Supergravity, $D = 11$
113. • Supergroup
114. • Supermanifold
115. • Supernumerary Killing Spinor
116. • Superscheme
117. • Supersliver
118. • Superspace
119. • Supersymmetric PP-Wave
120. • Supersymmetry
121. • Supertube
122. • Supertwistor
123. • Ternary Algebra
124. • Ternary Group
125. • Ternary Hopf Algebra
126. • Toron
127. • Universal Enveloping Superalgebra
128. • Volkov, Dmitriy Vasilievich
129. • Volkov-Akulov Theory
130. • Weak Hopf Algebra

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