

CURRICULUM VITAE

Dr. Hitoshi NISHINO (February, 2019)

Education	Bachelor of Science	1976, Dept. of Physics, Univ. of Tokyo
	Master of Science	1978, Dept. of Physics, Univ. of Tokyo
	Doctor of Science (Ph.D.)	1981, Dept. of Physics, Univ. of Tokyo

Present Position

(Sept. 2019 - present)
Adjunct Professor
Department of Physics
California State University
Fresno, CA 93710, USA

and

(August 2001 - present)
Senior Lecturer
Department of Physics & Astronomy
California State University
Long Beach, CA 90840, USA
Telephone: (562) 856-0138
E-Mail: H.Nishino@csulb.edu

Bibliography

Since 1977, there are about **190 publications** (Cf. List of Publications). In particular, **more than half of research papers from CSULB-campus has been accomplished by myself with Prof. S. Rajpoot.**

Previous Experience

04/1981 - 09/1982	Research Associate, Institute of Physics, University of Tokyo, Komaba, Tokyo, Japan.
10/1982 - 09/1984	Visiting Scientist, International Centre for Theoretical Physics, (ICTP), Trieste, 34100-I Italy.
10/1984 - 08/1986	Research Associate, Department of Physics, University of Maryland, College Park, MD 20742.
09/1986 - 08/1988	Research Associate, Department of Physics, Brandeis University, Waltham, MA 02254.
04/1987 - 08/1987	Scientific Associate, TH-Division, CERN, Genève 23, Switzerland.
09/1988 - 08/1990	Research Associate, Department of Physics, University of North Carolina, Chapel Hill, NC 27514-3255.
09/1990 - 01/1991	Research Associate,

	Department of Physics & Astronomy, University of Maryland, College Park.
02/1991 - 07/1993	Research Associate, Department of Physics & Astronomy, Howard University, Washington, DC.
07/1993 - 05/1994	Research Associate, Department of Physics & Astronomy, Howard University, Washington, DC.
07/1994 - 05/1995	Senior Lecturer, Department of Physics & Astronomy, Howard University, Washington, DC.
08/1995 - 07/2001	Research Associate, Department of Physics, University of Maryland, College Park.
08/2001 - present	Senior Lecturer, Department of Physics & Astronomy, California State University, Long Beach.

Grants Awarded

- (1) Co-Principal Investigator for **NSF Grant** for theoretical physics, for the years 2003 - 2006 (# 0308246),
- (2) Co-Principal Investigator for **NSF Grant** for theoretical physics, for the years 2008 - 2009 (# 0652996).
- (3) Research Collaborator (Senior Personnel) for **DOE Grant** for theoretical physics, for the years 2010 - 2012 (# DE-FG02-10ER41693).

Teaching Experience

- Taught a Graduate Course on '**Gauge Field Theory**',
at University of North Carolina, Chapel Hill, Spring Semester, 1989.
- Taught a Graduate Course on '**Gauge Fields, Integrable Models and Strings**',
at Howard University, Fall Semester, 1993.
- Taught an Undergraduate Course on '**Physics for Scientists and Engineers**',
at Howard University, Spring Semester, 1994.
- Taught an Undergraduate Course on '**General Physics**',
at Howard University, Spring Semester, 1994.
- Taught an Undergraduate Course on '**General Physics**',
at Howard University, Fall & Spring Semesters, 1995.
- Taught an Undergraduate Course on '**Physics for Scientists and Engineers**',
at Howard University, Fall & Spring Semesters, 1995.
- Taught a Graduate Course on '**Physical Mechanics**',
at Howard University, Fall & Spring Semesters, 1995.

Taught **LAB 100A** for undergraduates at CSULB,
 Fall '01 (1 class), Spring '02 (3 classes), Spring '04 (3 classes),
 Fall '06 (3 classes), Spring '09 (1 class), Fall, '09 (2 classes), Spring '12 (1 class).

Taught **LAB 100B** for undergraduates at CSULB,
 Spring '06 (2 classes), Fall '06 (1 class), Spring '09 (4 classes).

Taught **LAB 112** for undergraduates at CSULB,
 Fall '03 (2 classes), Spring '09 (1 class).

Taught **LAB 151** for undergraduates at CSULB,
 Spring '10 (2 classes).

Taught **LAB 152** for undergraduates at CSULB,
 Spring '05 (3 classes), Fall '05 (3 classes), Spring '06 (2 classes),
 Spring '04 (4 classes), Spring '07 (3 classes), Fall '07 (3 classes),
 Fall '08 (3 classes), Fall '10 (3 classes), Spring '11 (3 classes), Fall '11 (3 classes),
 Spring '12 (4 classes), Fall '12 (2 classes), Spring '13 (2 classes), Fall '13 (1 class),
 Spring '14 (1 class).

Taught **Astronomy 100L** for undergraduates at CSULB,
 Spring '09 (1 class).

Taught **PHYS 100A** for undergraduates at CSULB,
 Fall '16 (1 class).

Taught **PHYS 151**: 'Mechanics & Heat' for undergraduates at CSULB,
 Spring '10 (1 class), Fall '12 (1 class), Spring '13 (1 class), Fall '15 (1 class),
 Fall '16 (1 class), Spring '17 (1 class), Fall '17 (1 class), Spring '18 (1 class),
 Fall '18 (1 class), Spring '19 (1 class).

Taught **PHYS 152** for undergraduates at CSULB,
 Spring '11 (1 class), Spring '12 (1 class), Spring '13 (1 class), Spring '14 (2 classes),
 Fall '14 (1 class), Spring '15 (1 class), Spring '17 (1 class), Fall '17 (1 class),
 Spring '18 (1 class), Fall '18 (1 class), Spring '19 (1 class).

Taught **PHYS 154** for undergraduates,
 at CSULB, Fall Semester, '01.

Taught **PHYS 310**: 'Mechanics-I' for undergraduates at CSULB,
 Fall '09 (1 class), Fall '10 (1 class).

Taught **PHYS 340A** for undergraduates at CSULB,
 Spring '15 (1 class).

Taught **PHYS 340B** for undergraduates at CSULB,
 Fall '14 (1 class), Fall '15 (1 class).

Taught **PHYS 555** 'Elementary Particle Physics' for graduates,
 at CSULB, Fall Semester, '02.

Taught **PHYS 560A** for undergraduates at CSULB,
 Fall '13 (1 class).

Taught **PHYS 496, 691, 697 & 698** for graduates at CSULB,
 Spring '03.

Committee Service

- (i) A **Master-Thesis Committee-Member** for Brad GOLD in Spring, 2005.
- (ii) A **Master-Thesis Committee-Member** for Kevin REED in Spring, 2006.
- (iii) A **Master-Thesis Committee-Member** for Roy MONTALVO in Fall, 2008.

Service to Students at CSULB

(i) I have served on the **thesis committee** of students **Kevin REED, Brad GOLD, and Roy MONTALVO**. In collaboration with **K. REED** and Prof. Rajpoot, I have also published a research paper [127] in my publication list. In collaboration with **R. MONTALVO** and Prof. Rajpoot, I have also published a research paper [136] in my publication list.

(ii) I have helped the **President's Scholar Andrew FORRESTER** understand better 'General Relativity' and related subjects. This was done almost every week, about one hour per week.

(iii) I have attended several meetings of **Student of Physics Society (SPS)**, where we talked to several students who showed interest in working with us in our field.

(iv) I have presented a **one-hour introductory talk 'Extended Objects'** for the class of PHYS 555 'Elementary Particle Physics' on Dec. 5, '05 (Instructor: Prof. Rajpoot) that gave the students the introductory knowledge on this modern subject.

(v) I have contributed to a **talk with H.C. WANG and Prof. S. Rajpoot, entitled "Z's at the LHC"**, to be published in the '*Proceedings of CTP International Conference on Neutrino Physics*', held at Luxor, Egypt from 15-19 Nov., 2009. Proceedings will be published by International Journal of Modern Physics A.

(vi) I have written **recommendation letters** for a graduate student **Nicholas MILLER** who was my grading assistant for my PHYS-340B class (Fall '15). I have sent them to the institutions, where he is applying for PhD courses:

- (1) Graduate-Division, UC-Irvine (sent on 01-03-16)
- (2) Graduate-Division, UC-Riverside (sent on 01-08-16)
- (3) Graduate-Division, UC-Merced (sent on 01-16-16)

Teaching - Related Award

Range-Elevation awarded in Academic Year 2009 from CSULB

Conference Organizing

Coordinator for International-Workshop:

"Tenth and Final Workshop on Grand Unification" at UNC Chapel-Hill, April, 1989.

Research Interests

Theoretical High-Energy Physics: Special Interests include **Supergravity, Superstrings, Supermembranes, Extended Objects, Phenomenological Model-Building, Classical & Quantum Cosmology-Gravity, Dualities, Self-Dual Gravity-Gauge theories, and Supersymmetric Integrable Models.**

Referee and Reviewer for the following Journals

Physical Review D (PRD)
Physics Letters B (PLB)
Nuclear Physics B (NPB)
 Modern Physics Letters A (MPLA)
 Zeitschrift für Physik C
 Journal of Group Theory in Physics
 Mathematical Reviews
 Journal of High Energy Physics (JHEP)

Reviews of Research Papers Published in ‘Mathematical Reviews’

I have written review-articles on these published papers from an expert’s viewpoint:

- (1) G. Moore and M.R. Plesser, “Classical Scattering in $(1 + 1)$ -Dimensional String Theory”, Phys. Rev. **D46** (1992) 1730, in Math. Rev. **93j** (1993) 81083.
- (2) E. Verlinde, “The Master Equation of String Theory”, Nucl. Phys. **B381** (1992) 141, in Math. Rev. **93i** (1993) 81201.
- (3) T. Kugo and B. Zwiebach, “Target Space Duality as a Symmetry of String Field Theory”, Prog. Theor. Phys. **B87** (1992) 801, in Math. Rev. **93i** (1993) 81191.
- (4) A. Giveon and A. Shapere, “Gauge Symmetries of the $N=2$ String”, Nucl. Phys. **B386** (1992) 43, in Math. Rev. **93k** (1993) 81177.
- (5) Y. Shamir, “Compensating Fields and Anomalies in Supergravity”, Nucl. Phys. **B389** (1993) 323, in Math. Rev. **93k** (1993) 81235.
- (6) D. Anselmi and P. Fré, “Twisted $N=2$ Supergravity as Topological Gravity in Four-Dimensions”, Nucl. Phys. **B392** (1993) 401, in Math. Rev. **94g** (1994) 83134.
- (7) S. Ben-Menahem, “Self-Gravitating Strings in $2+1$ Dimensions”, Phys. Rev. **D47** (1993) 4344, in Math. Rev. **94g** (1994) 81232.
- (8) G.W. Gibbons, R.H. Rietdijk and J.W. van Holten, “SUSY in the Sky”, Nucl. Phys. **B404** (1993) 42, in Math. Rev. **94h** (1994) 83090.
- (9) C. Gomez and M. Ruiz-Altaba, “From Dual Amplitudes to Non-Critical Strings: A Brief review”, Revista del Nuovo Cimento **16** (1993) 1, in Math. Rev. **94k** (1994) 81212.
- (10) C. Castro, “ W -Gravity, $N=2$ Strings, and $2+2$ $SU(\infty)$ Yang-Mills Instantons”, Jour. Math. Phys. **35** (1994) 3013, Math. Rev. **95m** (1995) 81153.
- (11) F. Bastiannelli and N. Ohta, “A Hierarchy of Superstrings”, Phys. Rev. Lett. **73** (1994) 1199, in Math. Rev. **95i** (1995) 81185.
- (12) M.A. Lledó and A. Restuccia, “Higher Order Action for the Interaction of the String with the Dilaton”, Nucl. Phys. **B434** (1995) 231, Math. Rev. **95k** (1995) 81109.
- (13) M. Cvetič and D. Youm, “Supersymmetric Dyonic Black Holes in Kaluza-Klein Theory”, Nucl. Phys. **B438** (1995) 182, in Math. Rev. **96e** (1996) 83064a.
- (14) I.L. Buchbinder and S.M. Kuzenko, “Ideas and Methods of Supersymmetry and Supergravity”, Inst. of Phys. Publication (Bristol and Philadelphia, 1995), in Math. Rev. **96e** (1996) 81210.
- (15) F. Kawane, “String-Like Solutions in a Lovelock Type Gravity”, Bull. Dept. Gen. Ed., College Sci. Tech., Nihon Univ. No. **8** (1995) 23, Math. Rev. **97e** (1997) 83096.
- (16) M.R. Douglas and S.H. Shenker, “Dynamics of $SU(N)$ Supersymmetric Gauge Theory”, Nucl. Phys. **447** (1995) 271, **97j** 81345, MR1349478.
- (17) M.B. Green and M. Gutperle, “Configurations of Two D -Instantons”, Nucl. Phys. **B398** (1997) 69, **98c** 81165, MR1442908.
- (18) I. Bars, “Black Hole Entropy Reveals a Twelfth Dimension”, Phys. Rev. **D55** (1997) 3633, Math. Rev. **98g** (1998) 83098.
- (19) P. Hořava, “Matrix Theory and Heterotic Strings on Tori”, Nucl. Phys. **B505** (1997) 84, Math. Rev. **98k** (1998) 81218.

- (20) M. Carvalho, L.C.Q. Vilar and J.A. Helayël-Neto, “Supersymmetric Non-Linear σ -Models and Their Gauging in the Atiyah-Ward Space-Time”, *Helv. Phys. Acta* **71** (1998) 184, **99c** 81233 MR1609171.
- (21) J. de Boer and Y. Oz, “Monopole Condensation and Confining Phase of $N = 1$ Gauge Theories via M-Theory Fivebrane”, *Nucl. Phys.* **B511** (1998) 155, 1606071 (99e:81231).
- (22) M.J. Duff, “Ten to Eleven: It is not Too Late”, *Collection Review (CNO):* 1 632 364, **99j** 81137, MR1632360.
- (23) B. Zwiebach, “Oriented Open-Closed String Theory Revisted”, *Ann. of Phys.* **267** (1998) 193, *Math. Rev.* **99i** (1999) 81207.
- (24) K. Hosomichi and Y. Sugawara, “Hilbert Space of Space-Time SCFT in AdS₃ Superstring and T^{4kp}/S_{kp} SCFT”, *JHEP* **1999** no. 1, Paper 13, 2000c (2000) 81266.
- (25) C.-W.H. Lee and S.G. Rajeev, “A Lie Algegra for Closed Strings, Spin Chains, and Gauge Theories”, *Jour. Math. Phys.* **39** (1998) 5199, **2000c** 81277, MR1642317.
- (26) T. Kugo and T. Takahashi, *Prog. Theor. Phys.* **B99** (1998) 649, **2000c** (2000) 81277.
- (27) N. Berkovits, “Quantization of the Superstring with Manifest Super-Poincare Invariance”, *Phys. Lett.* **457** (1999) 94, **2000f** (2000) 81154.
- (28) J. Hashiba, “Branes and Vector-Like Supersymmetry Breaking Theories with Gauged Global Symmetry”, *Nucl. Phys.* **B550** (1999) 329, *Math. Rev.* **2000j** (192000) 81221.
- (29) N. Seiberg, “Dynamics of $N=1$ Supersymmetric Field Theories in Four Dimensions”, Vols. 1 & 2 (Princeton, NJ 1996/1997), 1425, *American Math. Soc.*, Providence, RI, 1999, in mathematical reviews, *Math. Rev.* **2000h** (1981316) 1701616.
- (30) T. Kugo and T. Takahashi, “Unoriented Open-Closed String Field Theory”, *Errata for Prog. Theor. Phys.* **99** (1998) 649, *Math. Rev.* **2001a** (1981203) .
- (31) F. Sugino, “Witten’s Open String Field Theory in Constant B -Field Background”, *J. High Energy Phys.* **2000** no. 3, paper 17, in *Mathematical Reviews*, *Math. Rev.* **2001f** (19) (2001) 81166.
- (32) Brandt Friedemann, “Lectures on Supergravity”, *Fort. Phys.* **50** (2002) 1126, in *mathematical reviews*, *Math. Rev.* **2003i** (1983097) 1932729.
- (33) Kor Van Hoof, “An Action for the $(2, 0)$ Self-Dual Tensor Multiplet in a Conformal Supergravity Background”, *Class. & Quant. Gr.* **17** (2000) 2093, in *Mathematical Reviews*, *Math. Rev.* **2001g** (1983129) .
- (34) M. Bertolini and M. Trigiante, “Regular R-R and NS-NS Black Holes”, *Int. Jour. Mod. Phys.* **A15** (2000) 5017, in *Mathematical Reviews*, *Math. Rev.* **2001k** (1983060) .
- (35) P. Biné truy, G. Girardi and R. Grimm, “Supergravity Couplings, a Geometric Formulation”, *Phys. Rep.* **343** (2001) 255, **2002d** (2002) 83100.
- (36) J. Ellis, M. Günaydin and M. Zagerman, “Options for Gauge Groups in Five-Dimensional Supergravity”, *JHEP* **11** (2001) 024, **2003a** 83100, MR1878494.
- (37) E. Bergshoeff, R. Kallosh and A. van Proyen, “Supersymmetry of RS bulk and brane”, *Kluwer Acad. Publ.* (2001) 49, **2003d** 83086, MR1893453.
- (38) N. de Wit, “Ten-Dimensional Supergravity Constraints from the Pure Spinor Formalism for the Superstring”, *Nucl. Phys.* **635** (2002) 75, **2003e** (2003) 83066.
- (39) E. Bergshoeff, “Supersymmetry in Singular Spaces”, *Forts. der Phys.* **50** (2002) 755, MR 1 942 482.
- (40) K.S. Stelle, “Brane Solutions in Supergravity”, in ‘*Particles and Fields (Campos do Jordao, 2001)*’, pp. 507 (*World Sci. Publishing* (2002)). **2003k** 83147, MR1955867, .
- (41) S.M. Kuzenko and S.A. McCarthy, “Nonlinear Self-Duality and Supergravity”, *JHEP*, **0302** (2003) 038, **2004b** 83152, MR1976986.
- (42) B. Chen, C.M. Chen and F.L. Lin, “Supergravity Null Scissors and Super-Crosses”, *JHEP* **04** (2003) 022, **2004h** 83097, MR1989846.
- (43) B. de Wit, “Supergravity”, presented at Les Houches Summer School: Euro Summer School on Unity of Fundamental Physics: ‘*Gravity, Gauge Theory and Strings*’, Les Houches, France (30 Jul - 31 Aug 2001), **2004i** 83144, MR2010970.
- (44) R. Güven, J.T. Liu, C.N. Pope and E. Sezgin, “Fine Tuning and Six-Dimensional Gauged $N=(1,0)$ Supergravity Vacua”, *Class. & Quan. Gr.* **21** (2004) 1001, **2004m** 83105, MR2036138.
- (45) S. Murthy, “Note on Non-Critical Superstrings in Various Dimensions”, *JHEP.* **11** (2003) 056, **81298**, MR2039434.

- (46) M. Cariglia, G.W. Gibbons, R. Güven and C.N. Pope, “Non-Abelian pp-Waves in D=4 Supergravity Theories”, *Class. & Quan. Gr.* **21** (2004) 2849, **2005e** 83103, MR2079777.
- (47) J.R. David, E. Gava and K.S. Narain, “Partial $N=1 \rightarrow N=2$ Supersymmetry Breaking and Gravity Deformed Chiral Rings”, *JHEP.* **06** (2004) 041, **2005i** 81160, MR2084416.
- (48) S.J. Gates, Jr. A. Kiss and W. Merrell, “Dynamical Equations from a First-Order Perturbative Super-space Formulation of 10D, N=1 String-Corrected Supergravity”, *JHEP.* **12** (2004) 047, **2005k** 83179, MR2128458.
- (49) P.S. Howe and E. Sezgin, “The Supermembrane Revisited”, *Class. & Quan. Gr.* **22** (2005) 2167, **2006a** 83054, MR2145239.
- (50) S. Bellucci, E. Ivanov and A. Sutulin, “ $N = 8$ Mechanics in $SU(2) \times SU(2)$ Harmonic Superspace”, *Nucl. Phys.* **B722** (2005) 297, **2006e** 81283, MR2160543.
- (51) M.K. Gaillard, “Effective Supergravity from the Weakly Coupled Heterotic String”, *Fort. Phys.* **54** (2006) 90, **2006k** 83226, MR2205579.
- (52) D. Berenstein, “Supersymmetry: A String Theory Point of View”, Latin-American School of Physics – XXXV ELAF, AIP Conf. Proc., 744 Amer. Inst. Phys, Melville, NY 2005, **2006i** 81150, MR2181532.
- (53) S. Reffert and E. Scheidegger, “Moduli Stabilization in Toroidal Type IIB Orientifolds”, *Fort. Phys.* **54** (2006) 462, **2007f** 81225, MR2230937.
- (54) L. Alvarez-Gaumé, F. Mayer and M.A. Vázquez-Mozo, “Comments on Noncommutative Gravity”, *Nucl. Phys.* **753** (2006) 92, **2007h** 83052, MR2256898.
- (55) B. de Wit, H. Samtleben and M. Trigiante, “The Maximal $D=4$ Supergravities”, *JHEP.* **06** (2007) 049, **2008j** 83086, MR2326602.
- (56) C. Doran, M. Faux, S. Gates, Jr., T. Hübsch, K. Iga, and G. Landweber, “On the Matter of $N = 2$ Matter”, *Phys. Lett.* **D659** (2008) 441, **2009b** 81190, MR2381194.
- (57) J. Gauntlett and O. Varela, “ $D=5$ $SU(2) \times U(1)$ Gauged Supergravity from $D=11$ Supergravity”, *JHEP.* **02** (2008) 083, *Mathematical Reviews*, **2009d** 83141, MR2385962.
- (58) B. de Wit, H. Samtleben, and M. Trigiante, “The Maximal $D = 4$ Supergravities”, *JHEP.* **06** (2007) 049, **2008j** 83086, MR2326602.
- (59) C. Doran, M. Faux, S. Gates, Jr, T. Hübsch, K. Iga, and G. Landweber, “Adinkras and the Dynamics of Superspace Prepotentials”, *Adv. Stud. Theor. Phys.*, **2** (2008) 113, *Mathematical Reviews*, **2009h** 81285, MR2416690.
- (60) E. Bergshoeff, J. Hartong, M. Hübscher and T. Ortin, “Stringy Cosmic Strings in Matter Coupled $N=2$, $d=4$ Supergravity”, *JHEP.* **08** (2008) 34, *Mathematical Reviews*, **2009k** 83105, MR2411326.
- (61) A. Castro, D. Grumiller, F. Larsen and R. McNees, “Holographic Description in AdS_2 Black Holes”, *JHEP.* **08** (2008) 28, **2010e** 83056, MR2460981.
- (62) M. Cederwall, “Pure spinor superfields, with application to D=3 conformal models. *Proc. Est. Acad. Sci.* **59** (2010) 280, 81T60, MR2752969.
- (63) D. Gaiotto, “Lectures on N=2 gauge theory”, *Class. & Quant. Gravity*, **27** (2010), 214002, 81T60, MR2734065.
- (64) A. Zheltukhin, D. Volkov, “Super-Poincar Group and Grassmann Variables”, *Ann. Phys.* **19** (2010), 177, 81R05, MR2607589.
- (65) E. Koh; S. Lee, S. Lee, “Topological Chern-Simons Sigma Model”, *JHEP* 2009, 122, 29, 81T45, MR2580687.
- (66) M. Faux, S.J. Gates, Jr. and T. Hübsch, “Effective Symmetries of the Minimal Supermultiplet of the $N=8$ Extended Worldline Supersymmetry”, *J. Phys.* **A42** (2009) 415206, 81T60, MR2545631.

The content of these reviews can be confirmed at the web-site:
<http://www.ams.org/mathscinet/search.html>
 by using the MR #, such as MR2460981 for (61).

Software Languages

MATHEMATICA, FORTRAN, T_EX and L^AT_EX.

Visa Status in the U.S. Permanent Resident with a Green Card

Publications at CSULB

Please note that out of total 154 Publications or Preprints from CSULB:

http://inspirehep.net/search?ln=en&ln=en&p=find+af+cal+state%2C+long+beach+and+d+after+1999&of=hb&action_search=Search&sf=&so=d&rm=&rg=250&sc=0

75 Publications (at least recorded at this web-site) are accomplished by Prof. S. Rajpoot and myself (& graduate-students and visitors):

http://inspirehep.net/search?ln=en&ln=en&p=find+af+cal+state%2C+long+beach+and+a+rajpoot+and+nishino+and+d+after+1999&of=hb&action_search=Search&sf=&so=d&rm=&rg=250&sc=0

LIST OF PUBLICATIONS (Dr. Hitoshi NISHINO)

- [1] **H. Nishino** and Y. Fujii, “On the Gauge Condition in Quantum Gravity”, **Prof. Theor. Phys.** **58** (1977) 381-383.
- [2] **H. Nishino** and Y. Fujii, “Some Phenomenological Consequences of the Super Higgs Effects”, **Zeit. für Phys.** **2C** (1979) **247-252**.
- [3] **H. Nishino**, “On Supergravity with Propagating Lorentz Connexion”, **Prog. Theor. Phys.** **66** (1982) 287-302.
- [4] **H. Nishino**, “Constraints to Freeze Non-Propagating Modes of Lorentz Connexion”, **Prog. Theor. Phys.** **67** (1982) **990-992**.
- [5] **H. Nishino**, “Local Tensor Calculus in Supergravity with Propagating Lorentz Connexion”, **Prog. Theor. Phys.** **68** (1982) **975-988**.
- [6] **H. Nishino**, “Consistency of Couplings in Supergravity Theory with Propagating Lorentz Connexion”, **Prog. Theor. Phys.** **68** (1982) **1765-1775**.
- [7] **H. Nishino**, “Consistency of Couplings in Supergravity with Propagating Lorentz Connexion”, in **Proceedings of Gauge Theory and Gravitation (g and G) Symposium, 1982**, Nara, Japan, World Scientific Co. Ltd.
- [8] **H. Nishino**, T. Inami and S. Watamura, “Cancellation of Quadratic Divergences and Uniqueness of Softly Broken Supersymmetry”, **Phys. Lett.** **117B** (1982) **197-202**.
- [9] **H. Nishino** and S. Watamura, “Supersymmetric Grand Unified Theory with Intermediate Supersymmetry Breaking”, **Nucl. Phys.** **B223** (1983) **235-251**.
- [10] **H. Nishino**, J.A. Helayël-Neto and I.G. Koh, “Locally Supersymmetric Grand Unified Theory with Stable Mass Hierarchy”, in **Proceedings of Winter School on Supergravity and Supersymmetry, 1983**, Karpacz, Poland, World Scientific Co. Ltd.
- [11] **H. Nishino**, I.G. Koh, and J.A. Helayël-Neto, “Locally Supersymmetric Grand Unifications with Two-Loop Stable Mass Hierarchy”, **Phys. Lett.** **131B** (1983) **75-79**.
- [12] **H. Nishino** and J.E. Kim, “Supergravity and Upper Bound for Supersymmetry Breaking Scale”, **Nuovo Cim.** **80A** (1984) **454-460**.
- [13] **H. Nishino**, I.G. Koh and J.A. Helayël-Neto, “Mass Hierarchy in Locally Supersymmetric Grand Unified Theories”, in **Proceedings of Asia Pacific Conference, Singapore, 1983**.
- [14] **H. Nishino**, Y. Fujimoto and R. Grigjanis, “Thermo-Field Theory vs. Imaginary Time Formalism”, **Phys. Lett.** **141B** (1984) **83-87**.
- [15] **H. Nishino**, “Recent Progress in Locally Supersymmetric Grand Unified Theories”, in **ICTP News Letters** **2** (1984) January-March.

- [16] **H. Nishino** and E. Sezgin, “Matter and Gauge Couplings in N=2 Supergravity in Six Dimensions”, **Phys. Lett.** **144B** (1984) 187-192.
- [17] **H. Nishino**, S.J. Gates, Jr. and E. Sezgin, “Supergravity in d=9 and Its Couplings to Non-Compact Sigma Model”, **Class. and Quant. Gr.** **3** (1986) 21-28.
- [18] **H. Nishino** and I.G. Koh, “Towards Realistic Kaluza-Klein Supergravity on Coset $E_7 / SO(12) \times Sp(1)$ with Chiral Fermions”, **Phys. Lett.** **153B** (1985) 45-50.
- [19] **H. Nishino** and K. Maeda, “Cosmological Solutions in $D = 6$, $N = 2$ Kaluza-Klein Supergravity – Friedmann Universe without Fine-Tuning”, **Phys. Lett.** **154B** (1985) 358-362.
- [20] **H. Nishino**, J.C. Pati and S.J. Gates, Jr., “A Preon model with Family Replication from a $D = 6$, $N = 2$ Supergravity Theory”, **Phys. Lett.** **154B** (1985) 363-366.
- [21] **H. Nishino** and K. Maeda, “An Attractor Universe in Six Dimensional $N = 2$ Supergravity Kaluza-Klein Theory”, **Phys. Lett.** **158B** (1985) 381-387.
- [22] **H. Nishino** and J. Kubo, “Search for $N = 2$ Supersymmetry in e^+e^- Annihilation”, **Phys. Lett.** **155B** (1985) 421-426.
- [23] **H. Nishino** and Y. Fujimoto, “Two-Loop Finite Temperature Effective Potential for the Wess-Zumino Model”, **Phys. Rev.** **D32** (1985) 2167-2173.
- [24] **H. Nishino** and S.J. Gates, Jr., “New $D = 10$, $N = 1$ Supergravity Coupled to Yang-Mills Multiplet and Anomaly Cancellations”, **Phys. Lett.** **157B** (1985) 157-163.
- [25] **H. Nishino**, T. Hübsch and J.C. Pati, “Do Superstrings Lead to Quarks or Preons?”, **Phys. Lett.** **163B** (1985) 111-117.
- [26] **H. Nishino**, I.G. Koh and Y.S. Myung, “Stability Analysis of Einstein/Maxwell Scalar System”, **Phys. Rev.** **D32** (1985) 3195-3200.
- [27] **H. Nishino** and S.J. Gates, Jr., “ $D = 2$ Superfield Supergravity, Local (Supersymmetry)² and Non-Linear σ -Models”, **Class. and Quant. Gravity** **3** (1986) 391-399.
- [28] **H. Nishino** and S.J. Gates, Jr., “Dual Versions of Higher Dimensional Supergravities and Anomaly Cancellations”, **Nucl. Phys.** **B268** (1985) 532-542.
- [29] **H. Nishino**, E. Bergshoeff and E. Sezgin, “Heterotic σ -Models and Conformal Supergravity in Two Dimensions”, **Phys. Lett.** **166B** (1986) 141-148.
- [30] **H. Nishino** and S.J. Gates, Jr., “New $D = 10$, $N = 1$ Superspace Supergravity and Local Symmetries of Superstrings”, **Phys. Lett.** **173B** (1986) 46-51.
- [31] **H. Nishino** and S.J. Gates, Jr., “Manifestly Supersymmetric $O(\alpha')$ Superstring Corrections in New $D = 10$, $N = 1$ Supergravity- Yang-Mills Theory”, **Phys. Lett.** **173B** (1986) 52-58.

- [32] **H. Nishino** and E. Sezgin, “The Complete $N = 2$, $d = 6$ Supergravity with Matter and Gauge Couplings”, **Nucl. Phys. B278 (1986) 353-379**.
- [33] **H. Nishino** and S.J. Gates, Jr., “Manifestly Supersymmetric Extension of (Curvature)²-Terms in Six Dimensional $N = 2$ Supergravity”, **Phys. Lett. 173B (1986) 417-422**.
- [34] **H. Nishino** and S.J. Gates, Jr., “Euler Characteristics in New $D = 10$, $N = 1$ Superspace Supergravity”, **Nucl. Phys. B282 (1987) 1-12**.
- [35] **H. Nishino** and D. Chang, “Heterotic String $O(\alpha')$ Corrections to $D = 10$, $N = 1$ Supergravity”, **Phys. Lett. 179B (1986) 257-261**.
- [36] **H. Nishino**, “General Form of String Corrections to Supersymmetry Transformation in $D = 10$, $N = 1$ Supergravity”, **Phys. Lett. 188B (1987) 437-441**.
- [37] **H. Nishino**, E. Bergshoeff and E. Sezgin, “(8,0) Locally Supersymmetric Sigma-Model with Conformal Invariance in Two Dimensions”, **Phys. Lett. 186B (1987) 67-72**.
- [38] **H. Nishino** and S.J. Gates, Jr., “On $D = 10$, $N = 1$ Supersymmetry, Superspace Geometry, and Superstring Effects (II)”, **Nucl. Phys. B291 (1987) 205-220**.
- [39] **H. Nishino** and S.J. Gates, Jr., “Calabi-Yau Manifold Compactification at $O(\alpha'^3)$ and $N = 1$ Supersymmetry in Four Dimensions”, **Phys. Lett. 189B (1987) 45-51**.
- [40] **H. Nishino** and R.-M. Xu, “Space-Time Supersymmetry Breaking in Heterotic String Theory”, **Phys. Lett. 196B (1987) 467-472**.
- [41] **H. Nishino** and T. Inami, “Superstring Loop Corrections to σ -Model β -Functions”, **Phys. Lett. 196B (1987) 151-156**.
- [42] **H. Nishino** and A. Das, “String Loop Effect on BRST Charge”, **Phys. Lett. 197B (1987) 342-346**.
- [43] **H. Nishino**, M.T. Grisaru and D. Zanon, “ β -Function Approach to Green-Schwarz String”, **Phys. Lett. 206B (1988) 625-629**.
- [44] **H. Nishino**, “Superstring Effect on $D = 4$, $N = 1$ Supergravity”, **Phys. Lett. 214B (1988) 374-380**.
- [45] **H. Nishino**, M.T. Grisaru and D. Zanon, “ β -Functions in the Green-Schwarz Strings”, **Nucl. Phys. B314 (1989) 363-389**.
- [46] **H. Nishino** and Y. Okada, “ β -Function Approach to the P-Adic String”, **Phys. Lett. 219B (1989) 258-264**.
- [47] **H. Nishino**, M.T. Grisaru and D. Zanon, “ β -Functions for the Heterotic Green-Schwarz Sigma-Model”, in **Proceedings of Superstring Workshop at the University of Maryland, 1988**, p. 349-364, eds. S.J. Gates, Jr., C.R. Preitshopf and W. Siegel, (World Scientific, May, 1988).

- [48] **H. Nishino**, Y. Okada and M.R. Ubriaco, “Effective Field Theory from β -Function in p -Adic String”, **Phys. Rev. D40 (1989) 1153-1165**.
- [49] **H. Nishino** and P.H. Frampton, “Theory of p -Adic Closed Strings”, **Phys. Rev. Lett. 62 (1989) 1960-1963**.
- [50] **H. Nishino** and B.-H. Lee, “Wormhole Effects on Masses of Vector and Gravitino Fields”, **Phys. Lett. 234B (1990) 473-479**.
- [51] **H. Nishino**, in “Wormhole Effects on Vector and Gravitino Masses”, in *Proceedings of Tenth and Final Workshop on Grand Unifications*, at Univ. of North Carolina, p. 350-354, April, 1989, (World Scientific).
- [52] **H. Nishino** and B.-H. Lee, “Spontaneous Gauge Breaking in Conformal Theory of Four-Dimensional Superstring”, **Phys. Lett. 233B (1990) 128-134**.
- [53] **H. Nishino**, “Dimensional Reduction of Green-Schwarz Superstring on Calabi-Yau Manifold”, **Nucl. Phys. B338 (1990) 386-402**.
- [54] **H. Nishino** and P.H. Frampton, “Stability Analysis of p -Adic String Solitons”, **Phys. Lett. 242B (1990) 354-356**.
- [55] **H. Nishino** and S.J. Gates, Jr., “Does $D = 4$, $N = 8$ Supergravity Know about Heterotic String?”, **Class. and Quant. Gr. 8 (1991) 809-818**.
- [56] **H. Nishino** and O. Yasuda, “Nonperturbative Aspects of String Models”, Univ. of North Carolina preprint, IFP-367-UNC, (Jan. 1990).
- [57] **H. Nishino**, J. Agrawal, P. Frampton, J. Ng and O. Yasuda, “Sarks as Additional Fermions”, **Nucl. Phys. B351 (1991) 161-182**.
- [58] **H. Nishino**, “Superstring Corrections in Simplest Constraint Set in $D = 10$, $N = 1$ Supergravity”, **Phys. Lett. 258B (1991) 104-110**.
- [59] **H. Nishino** and S.J. Gates, Jr., “Realization of Spacetime Conformal Symmetry in $D = 10$, $N = 1$ Superspace”, **Phys. Lett. 266B (1991) 14-20**.
- [60] **H. Nishino**, S.J. Gates, Jr. and R. Oerter, “The 1-st. Ilk Superparticle in 2-nd. Order Lagrangian and Background”, **Phys. Lett. 265B (1991) 278-286**.
- [61] **H. Nishino**, “Does Heterotic String Generate Chern-Simons Action in Three-Dimensions?”, **Mod. Phys. Lett. A7 (1992) 1805-1815**.
- [62] **H. Nishino** and S.J. Gates, Jr., “Chern-Simons Theories with Supersymmetries in Three-Dimensions”, **Int. Jour. Mod. Phys. A8 (1993) 3371-3421**.
- [63] **H. Nishino**, “Chern-Simons Theories in Three-Dimensions from Heterotic String in Ten-Dimensions”, in **Proceedings of “Strings and Symmetries 1991”**, pp. 130-131, Stony Brook, May 20-25, 1991, eds. N. Berkovits *et al.* (1992, World Scientific).

- [64] **H. Nishino** and S.J. Gates, Jr., “Remarks on $N = 2$ Supersymmetric Chern-Simons Theories”, **Phys. Lett.** **281B (1992) 72-80**.
- [65] **H. Nishino**, “Chern-Simons-Supermembrane Connection”, Jour. of Group Theory for Physicists, **1** (1993) 61-68.
- [66] **H. Nishino** and S.J. Gates, Jr., “ $N = (2, 0)$ Superstring as the Underlying Theory of Self-Dual Yang-Mills Theory”, **Mod. Phys. Lett.** **A7 (1992) 2543-2554**.
- [67] **H. Nishino**, S.V. Ketov and S.J. Gates, Jr., “Majorana-Weyl Spinors and Self-Dual Gauge Fields in $2 + 2$ Dimensions”, hep-th/9203081, **Phys. Lett.** **307B (1993) 323-330**.
- [68] **H. Nishino**, S.J. Gates, Jr., and S.V. Ketov, “Supersymmetric Self-Dual Yang-Mills and Supergravity as Background of Green-Schwarz Superstring”, hep-th/9203080, **Phys. Lett.** **307B (1993) 331-338**.
- [69] **H. Nishino**, S.J. Gates, Jr. and S.V. Ketov, “Extended Supersymmetry and Self-Duality in $2+2$ Dimensions”, hep-th/9203078, **Phys. Lett.** **297B (1992) 99-104**.
- [70] **H. Nishino**, S.V. Ketov and S.J. Gates, Jr., “Self-Dual Supersymmetry and Supergravity in Atiyah Space-Time”, hep-th/9207042, **Nucl. Phys.** **B393 (1993) 149-210**.
- [71] **H. Nishino** and S.J. Gates, Jr., “Supersymmetric Integrable Systems Embedded in Supersymmetric Self-Dual Yang-Mills Theory”, hep-th/9210163, **Phys. Lett.** **299B (1993) 255-261**.
- [72] **H. Nishino**, “Exact Solutions for Self-Dual Yang-Mills and Self-Dual Tensor Multiplets on Gravitational Instanton Background”, hep-th/9210093, **Phys. Lett.** **307B (1993) 339-346**.
- [73] **H. Nishino**, “Self-Dual Supergravity and Supersymmetric Yang-Mills Coupled to Green-Schwarz Superstring”, hep-th/9211042, **Int. Jour. Mod. Phys.** **A9 (1994) 3077-3101**.
- [74] **H. Nishino**, “Self-Dual Supersymmetric Yang-Mills Theory Generates Witten’s Topological Field Theory”, hep-th/9303033, **Phys. Lett.** **309B (1993) 68-74**.
- [75] **H. Nishino**, “Supersymmetric KP Systems Embedded in Supersymmetric Self-Dual Yang-Mills Theory”, hep-th/9303089, **Phys. Lett.** **318B (1993) 107-114**.
- [76] **H. Nishino**, “Self-Dual Supersymmetric Yang-Mills Theory Generates Wess-Zumino-Novikov-Witten Model in Two-Dimensions”, hep-th/9307096, **Phys. Lett.** **316B (1993) 298-306**.
- [77] **H. Nishino**, “Two-Dimensional Dilaton Black Hole Solution for $N = 2$ Superstring Theory”, hep-th/9312198, **Phys. Lett.** **324B (1994) 315-321**.
- [78] **H. Nishino**, “Super-Lax Operators Embedded in Self-Dual Supersymmetric Yang-Mills Theory”, hep-th/9311006, **Mod. Phys. Lett.** **A11 (1996) 2417-2426**.
- [79] **H. Nishino**, “Supersymmetry Breaking and Fermat’s Last Theorem”, hep-th/9403014, **Mod. Phys. Lett.** **A10 (1995) 149-157**.

- [80] **H. Nishino**, “ $N = 2$ Superstring Theory Generates Supersymmetric Chern-Simons Theory”, hep-th/9404125, **Mod. Phys. Lett. A9 (1995) 3255-3266**.
- [81] **H. Nishino**, “ $N = 2$ Supersymmetric Calabi-Yau Hypersurface Sigma-Models in Curved Two-Dimensions”, hep-th/9409092, **Phys. Lett. 362B (1995) 78-87**.
- [82] **H. Nishino**, “Alternative $N = (4, 0)$ Superstring and σ -Models”, hep-th/9412152, **Phys. Lett 355 (1995) 117-126**.
- [83] **H. Nishino**, “Stationary Axisymmetric Black Holes, $N = 2$ Superstring, Self-Dual Gauge and Gravity Theories”, hep-th/9504142, **Phys. Lett. 359B (1995) 77-86**.
- [84] **H. Nishino**, “Conical Singularity in Three or Four-Dimensions and Supersymmetry Breaking”, hep-th/9510153, **Phys. Lett. 370B (1996) 65-75**.
- [85] **H. Nishino** and S.J. Gates, Jr., “Toward an Off-Shell Eleven-Dimensional Supergravity Limit of M-Theory”, hep-th/9602011, **Phys. Lett. 388B (1996) 504-511**.
- [86] **H. Nishino** and S.J. Gates, Jr., “ \mathcal{N}_0 -Extended Supergravity and Chern-Simons Theories”, hep-th/9606090, **Nucl. Phys. B480 (1996) 573-588**.
- [87] **H. Nishino** and E. Sezgin, “Supersymmetric Yang-Mills Equations in $10 + 2$ Dimensions”, hep-th/9607185, **Phys. Lett. 388B (1996) 569-576**.
- [88] **H. Nishino** and E. Sezgin, “New Couplings in Six-Dimensional Supergravity”, hep-th/9703075, **Nucl. Phys. B505 (1997) 497-516**.
- [89] **H. Nishino**, “Supergravity in $10+2$ Dimensions as Consistent Background for Superstring”, hep-th/9703214, **Phys. Lett. 428B (1998) 85-94**.
- [90] **H. Nishino**, “ $N = 2$ Chiral Supergravity in $(10 + 2)$ -Dimensions as Consistent Background for Super $(2 + 2)$ -Brane”, hep-th/9706148, **Phys. Lett. 437B (1998) 303-314**.
- [91] **H. Nishino**, “Supersymmetric Yang-Mills Theories in $D \geq 12$ ”, hep-th/9708064, **Nucl. Phys. B523 (1998) 450-464**.
- [92] **H. Nishino**, “Lagrangian and Covariant Field Equations for Supersymmetric Yang-Mills Theory in $12D$ ”, hep-th/9710141, **Phys. Lett. 426B (1998) 64-72**.
- [93] **H. Nishino**, “Alternative Formulation of Duality-Symmetric Supergravity in Eleven-Dimensions Coupled to Super M-5-Brane”, hep-th/9802009, **Mod. Phys. Lett. A14 (1999) 977-992**.
- [94] **H. Nishino**, “Parity Conservation in Supersymmetric Vector-Like Theories”, hep-th/9804162, **Phys. Rev. D61 (2000) 025008**.
- [95] **H. Nishino**, “Supergravity Theories in $D \geq 12$ Coupled to Super p -Branes”, hep-th/9807199, **Nucl. Phys. B542 (1999) 217-261**.

- [96] **H. Nishino**, “Super Eightbrane in Superspace”, hep-th/9901027, **Phys. Lett.** **457B (1999)** 51-60.
- [97] **H. Nishino**, “Twelve-Dimensional Supersymmetric Gauge Theory as the Large N Limit”, hep-th/9901104, **Phys. Lett.** **452B (1999)** 265-273.
- [98] **H. Nishino** and S.J. Gates, Jr., “The * Report”, hep-th/9908136, **Class. Quant. Grav.** **17 (2000)** 2139-2148.
- [99] **H. Nishino**, “Non-Linear Realization of \mathcal{N}_0 -Extended Supersymmetry”, hep-th/0002029, **Nucl. Phys.** **B586 (2000)** 491-517.
- [100] **H. Nishino** and P. Mora, “Fundamental Extended Objects for Chern-Simons Supergravity”, hep-th/0002077, **Phys. Lett.** **482B (2000)** 222-232.
- [101] **H. Nishino**, “Supersymmetric Yang-Mills Theory in Eleven Dimensions”, hep-th/0008029, **Phys. Lett.** **492B (2000)** 201-213.
- [102] **H. Nishino** and S.J. Gates, Jr., “Will the Real 4D, $N = 1$ SG Limit of Superstring Theories Please Stand Up?”, hep-th/0008206, **Phys. Lett.** **492B (2000)** 178-186.
- [103] **H. Nishino** and **S. Rajpoot**, “Alternative $N = 2$ Supergravity in Five-Dimensions with Singularities”, hep-th/0011066, **Phys. Lett.** **502B (2001)** 246 ~ 258.
- [104] **H. Nishino** and S.J. Gates, Jr., “Deliberations on 11D Superspace for the M-Theory Effective Action”, hep-th/0101037, **Phys. Lett.** **B508 (2001)** 155 ~ 167.
- [105] **H. Nishino** and **S. Rajpoot**, “Note on Embedding M-Theory Corrections into Eleven-Dimensional Superspace”, hep-th/0103224, **Phys. Rev.** **D64 (2001)** 124016.1 ~ 9.
- [106] **H. Nishino** and **S. Rajpoot**, “Alternative $N = 2$ Supergravity in Singular Five Dimensions with Matter/Gauge Couplings”, hep-th/0105138, **Nucl. Phys.** **B612 (2001)** 98 ~ 122.
- [107] **H. Nishino**, S.J. Gates, Jr. and **S. Rajpoot**, “Teleparallel Superspace in Eleven Dimensions Coupled to Supermembranes”, CSULB-PA-01-2, hep-th/0107155, **Phys. Rev.** **D65 (2002)** 024013.1 ~ 7.
- [108] **H. Nishino** and **S. Rajpoot**, “Unimodular Supergravity”, CSULB-PA-01-3, hep-th/0107202, **Phys. Lett.** **528B (2002)** 259 ~ 268.
- [109] **H. Nishino** and **S. Rajpoot**, “Teleparallel Complex Gravity as Foundation for Noncommutative Gravity”, CSULB-PA-01-1, hep-th/0107216, **Phys. Lett.** **532B (2002)** 334 ~ 344.
- [110] **H. Nishino** and **S. Rajpoot**, “Generalized BF Theory in Superspace as Underlying Theory of 11D Supergravity”, CSULB-PA-01-4, hep-th/0108123, **Class. & Quant. Gr.** **19 (2002)** 4095 ~ 4107.

- [111] **H. Nishino and S. Rajpoot**, “Noncommutative Supersymmetric Yang-Mills Theory with Higher-Derivatives in Ten-Dimensions”, hep-th/0108154, CSULB-PA-01-5, **Phys. Rev. D65 (2002) 085005.1 ~ 7**.
- [112] **H. Nishino and S. Rajpoot**, “Supersymmetric $E_{8(+8)}/SO(16)$ Sigma-Model Coupled to $N = 1$ Supergravity in Three-Dimensions”, CSULB-PA-02-1, hep-th/0203102, **Phys. Lett. 535B (2002) 337 ~ 348**.
- [113] **H. Nishino and S. Rajpoot**, “Axisymmetric Gravitational Solutions as Possible Classical Backgrounds Around Closed String Mass Distributions”, CSULB-PA-02-2, hep-th/0204101, **Phys. Lett. B540 (2002) 125 ~ 136**.
- [114] **H. Nishino and S. Rajpoot**, “Gauged N=2 Supergravity in Nine Dimensions and Domain Wall Solutions”, CSULB-PA-02-3, hep-th/0207246, **Phys. Lett. B546 (2002) 261 ~ 272**.
- [115] **H. Nishino and S. Rajpoot**, “Topological Gauging of $N = 16$ Supergravity in Three-Dimensions”, CSULB-PA-02-4, hep-th/0209106, **Phys. Rev. D67 (2003) 025009-1 ~ 10**.
- [116] **H. Nishino and S. Rajpoot**, “Octonions, G_2 Symmetry, Generalized Self-Duality and Supersymmetry in Dimensions $D \leq 8$ ”, CSULB-PA-02-5, hep-th/0210132, **Journal of High Energy Physics, JHEP 04 (2004) 020 ~ 041**.
- [117] **H. Nishino and S. Rajpoot**, “Self-Dual $N = (1, 0)$ Supergravity in Eight Dimensions with Reduced Holonomy $Spin(7)$ ”, CSULB-PA-03-01, hep-th/0302059, **Phys. Lett. 564B (2003) 269 ~ 279**.
- [118] **H. Nishino and S. Rajpoot**, “Self-Dual Supergravity in Seven Dimensions with Reduced Holonomy G_2 ”, CSULB-PA-03-2, hep-th/0306075, **Phys. Lett. 569B (2003) 102 ~ 112**.
- [119] **H. Nishino and S. Rajpoot**, “Noncommutative Self-Dual Supersymmetric Yang-Mills Theory”, CSULB-PA-03-3, hep-th/0306290, **Phys. Lett. 572B (2003) 91 ~ 100**.
- [120] **H. Nishino and S. Rajpoot**, “Supermembrane with Non-Abelian Gauging and Chern-Simons Quantization”, CSULB-PA-03-04, hep-th/0309100, **European Physical Journal 39 (2005) 389 ~ 395**.
- [121] **H. Nishino and S. Rajpoot**, “Alephnull-Extended Supersymmetric Chern-Simons Theory for Arbitrary Gauge Groups”, CSULB-PA-04-01, hep-th/0402111, **Phys. Rev. 70 (2004) 027701-1 ~ 3**.
- [122] **H. Nishino and S. Rajpoot**, “Hodge Duality and Cosmological Constant”, CSULB-PA-04-3, hep-th/0404088, **Mod. Phys. Letts. A. 21 (2006) 127 ~ 142**.
- [123] **H. Nishino and S. Rajpoot**, “Self-Dual Vector Multiplet in 3D with Gauged Scale Covariance”, CSULB-PA-04-4, hep-th/0407165, **Jour. of High Energy Phys. JHEP 12 (2004) 014 ~ 025**.

- [124] **H. Nishino and S. Rajpoot**, “Supersymmetric Gauged Scale Covariance in Ten and Lower Dimensions”, CSULB-PA-04-5, hep-th/0407203, **Phys. Lett. 604B (2004) 123 ~ 132**.
- [125] **H. Nishino, S. Rajpoot and K. Reed**, “Supersymmetric Dirac-Born-Infeld Action with Self-Dual Mass Term”, CSULB-PA-04-6, hep-th/0410052, **Class. & Quant. Gr. 22 (2005) 1553 ~ 1562**.
- [126] **H. Nishino and S. Rajpoot**, “Dual Vector Multiplet Coupled to Dual N=1 Supergravity in 10D”, CSULB-PA-04-7, hep-th/0410052, **Phys. Rev. D71 (2005) 085011-1 ~ 9**.
- [127] **H. Nishino and S. Rajpoot**, “ \mathcal{N}_0 -Extended Hypergravity in Three-Dimensions” CSULB-PA-05-1, hep-th/0504097, **Phys. Rev. D71 (2005) 1250021-1 ~ 7**.
- [128] **H. Nishino and S. Rajpoot**, “Non-Abelian Tensors with Consistent Interactions”, CSULB-PA-05-2, hep-th/0508076, **Phys. Rev. D72 (2005) 085020-1 ~ 7**.
- [129] **H. Nishino and S. Rajpoot**, “Interacting Non-Abelian Vector Spinor and Nilpotent Spinor Charges”, CSULB-PA-05-3, hep-th/0511267, **Class. & Quant. Gravity 23 (2006) 5215 ~ 5225**.
- [130] **H. Nishino and S. Rajpoot**, “(Curvature)²-Terms for Supergravity in Three Dimensions”, CSULB-PA-06-1, hep-th/0607241, **Phys. Lett. 639B (2006) 110 ~ 116**.
- [131] **H. Nishino and S. Rajpoot**, “Self-Dual Non-Abelian Vector Multiplet in Three-Dimensions”, CSULB-PA-06-2, hep-th/0611055, **Phys. Rev. D74 (2006) 105001-1 ~ 7**.
- [132] **H. Nishino and S. Rajpoot**, “Nilpotent Spinor Symmetry with Interacting Spin 3/2 Field”, in **Proceedings for SUSY06, UC-Irvine (June, '06)**, pp. 537 ~ 541, CSULB-PA-06-3, hep-th/0611321.
- [133] **H. Nishino and S. Rajpoot**, “Broken Scale Invariance in the Standard Model”, CSULB-PA-06-4, **AIP Conf. Proc. 881 (2007) pp. 82 ~ 93**, Melville, New York, 2006.
- [134] **H. Nishino, S. Rajpoot and R. Montalvo**, “Self-Dual Yang-Mills Multiplet in Three Dimensions Coupled to Supergravity”, CSULB-PA-06-5, arXiv:0707.3653 [hep-th], **Phys. Rev. D75 (2007) 125016-1 ~ 8**.
- [135] **H. Nishino and S. Rajpoot**, “Dilaton and Axion as Supersymmetric Compensators”, CSULB-PA-06-6, **Phys. Rev. D76 (2007) 065004-1 ~ 7**.
- [136] **H. Nishino and S. Rajpoot**, “Comment on Shadow and Non-Shadow Extensions of the Standard Model”, CSULB-PA-07-01, hep-th/0702080.
- [137] **H. Nishino and S. Rajpoot**, “Vector Multiplet in Non-Adjoint Representation of SO(N)”, CSULB-PA-07-02, arXiv: 0704.2905 [hep-th], **Phys. Rev. D75 (2007) 125018-1 ~ 7**.

- [138] **H. Nishino and S. Rajpoot**, “Comment on Electroweak Higgs as a Pseudo-Goldstone Boson of Broken Scale Invariance”, CSULB-PA-07-04, arXiv: 0704.1836 [hep-ph].
- [139] **H. Nishino and S. Rajpoot**, “ $N = 4$ Supersymmetric Yang-Mills Multiplet in Non-Adjoint Representations”, CSULB-PA-07-05, arXiv:0707.2977 [hep-th], **Phys. Rev. D76 (2007) 047703-1 ~ 3**.
- [140] **H. Nishino and S. Rajpoot**, “Green-Schwarz, Nambu-Goto Actions, and Cayley’s Hyperdeterminant”, CSULB-PA-07-06, arXiv: 0709.0973 [hep-th], **Phys. Lett. 652B (2007) 135 ~ 140**.
- [141] **H. Nishino and S. Rajpoot**, “ $N=1$ Supergravity in Euclidean Eleven Dimensions in Terms of Graded Pseudo-Majorana Spinors”, CSULB-PA-07-07, **Jour. of Phys. A41 (2008) 285403**.
- [142] **H. Nishino and S. Rajpoot**, CSULB-PA-08 (Dec. 2007) “Comment on Papers by Foot, Kobakhidze, McDonald and Volkas Relating to Scale Invariance Symmetry” arXiv:0712.2487 [hep-ph].
- [143] **H. Nishino and S. Rajpoot**, “Octonions and Supersymmetry in Three Dimensions”, CSULB-PA-07-08, **Class. & Quant. Gr. 25 (2008) 195003**.
- [144] **H. Nishino and S. Rajpoot**, “Lorentz-Covariant Non-Abelian Gauging of Supermembrane’, CSULB-PA-08-01, arXiv:0806.0660 [hep-th], **Phys. Rev. D77 (2008) 106002-1 ~ 8**.
- [145] **H. Nishino and S. Rajpoot**, “Mass Deformation of Bagger-Lambert Theory in 3D with Reduced $N=1$ Supersymmetry”, CSULB-PA-08-02, **Phys. Rev. D78 (2008) 085006-1 ~ 6**.
- [146] **H. Nishino and S. Rajpoot**, “Weyl’s Scale Invariance: Inflation, Dark Matter and Dark Energy Connections”, ‘Proceedings of Dark Side of Universe’, eds. Shgabaan Khalil, Egypt. 2008.
- [147] **H. Nishino and S. Rajpoot**, “Triality and Bagger-Lambert Theory”, CSULB-PA-08-04, arXiv:0901.1173, **Phys. Lett. 671B (2009) 415 ~ 421**.
- [148] **H. Nishino and S. Rajpoot**, “Dilaton and Axion as Compensators Coupled to $N=1$ Supergravity”, CSULB-PA-08-05, **Phys. Rev. D78 (2008) 125006-1 ~ 7**.
- [149] **H. Nishino and S. Rajpoot**, “Implication of Compensator Field and Local Scale Invariance in the Standard Model”, CSULB-PA-08-06, **Phys. Rev. D79 (2009) 125025-1 ~ 6**.
- [150] **H. Nishino and S. Rajpoot**, “Alternative Auxiliary Fields for Chiral Multiplet”, **Phys. Rev. D80 (2009) 127701-1 ~ 4**.
- [151] **H. Nishino and S. Rajpoot**, “Weyl’s Scale Invariance for Standard Model, Renormalizability and Zero Cosmological Constant”, **Class. & Quant. Gr. 28 (2011) 145014**.

- [152] **H. Nishino and S. Rajpoot**, “Four-Dimensional N=1 F[R] Supergravity”, **Phys. Lett. 687B (2010) 382 ~ 387**.
- [153] **H. Nishino and S. Rajpoot**, “Supersymmetric Lorentz Chern-Simons Terms Coupled to Supergravity”, **Phys. Rev. D81 (2010) 085029-1 ~ 6**.
- [154] **H. Nishino, S. Rajpoot and H.C. Wang**, “Z’s at the LHC”, To be published in **Proceedings of the CTP International Conference on Neutrino Physics** held at Luxor, Egypt from 15-19 Nov. ‘09.
- [155] **H. Nishino and S. Rajpoot**, “Teleparallelism for Massive Spin 2 Field”, **Class. & Quant. Gr. 28 (2011) 125019 ~ 125029**.
- [156] **H. Nishino and S. Rajpoot**, “Alephnull AdS Supergravity with Lorentz Chern-Simons Forms in Three Dimensions”, **Phys. Lett. B692 (2010) 336 ~ 341**.
- [157] **H. Nishino and S. Rajpoot**, “Duality-Symmetric Supersymmetric Yang-Mills in Three Dimensions”, **Phys. Rev. D82 (2011) 087701-1 ~ 4**, DOI: 10.1103/PhysRevD.82.087701.
- [158] **H. Nishino and S. Rajpoot**, “Vector Multiplets with Non-Polynomial Interactions in 3D”, **Phys. Rev. D83 (2011) 087701-1 ~ 4**
- [159] **H. Nishino and S. Rajpoot**, “Stückelberg Mechanism for Massive Tensor Multiplets”, **Phys. Rev. D83 (2011) 085008-1 ~ 8**. DOI: 10.1103/PhysRevD.83.085008
URL: <http://link.aps.org/doi/10.1103/PhysRevD.83.085008>
- [160] **H. Nishino and S. Rajpoot**, “Interacting N=1 Vector-Spinor Multiplet in 3D”, **Phys. Rev. D83 (2011) 127701 ~ 4**. DOI: 10.1103/PhysRevD.83.127701
- [161] **H. Nishino and S. Rajpoot**, “Enhanced Duality Rotation Symmetries for a Pair of Dirac-Born-Infeld Actions”, **Int. Jour. Mod. Phys. 27 (2012) 1250056-1250067**.
- [162] **H. Nishino and S. Rajpoot**, “N=1 Non-Abelian Tensor Multiplet in Four Dimensions”, **Phys. Rev. D85 (2012) 105017-1 ~ 10**,
- [163] **H. Nishino and S. Rajpoot**, “Self-Dual Non-Abelian N=1 Tensor Multiplet in D=2+2”, **Nucl. Phys. B863 (2012) 510 ~ 524**,
DOI: <http://www.sciencedirect.com/science/article/pii/S0550321312003185>
- [164] **H. Nishino and S. Rajpoot**, “Variant N=1 Supersymmetric Non-Abelian Proca-Stueckelberg Formalism in Four Dimensions”, CSULB-PA-12-01 (Feb. 2011). **Nucl. Phys. B 872 (2013) 213 ~ 227**.
- [165] **H. Nishino and S. Rajpoot**, “Self-Dual Yang-Mills and Vector-Spinor Fields, Nilpotent Fermionic Symmetry, and Supersymmetric Integrable Systems”, CSULB-PA-12-03 (May, 2011), **Phys. Rev. D86 (2012) 065012-1 ~ 7**
- [166] **H. Nishino and S. Rajpoot**, “Non-Abelian Tensor Multiplet in 4D”, CSULB-PA-12-04 (May, 2012). To be published in the **Proceedings of PASCOS 2012**.

- [167] **H. Nishino**, E. Guendelman and **S. Rajpoot**, “Lorentz-Covariant Four-Vector Formalism for Two-Measure Theory”, CSULB-PA-12-08, **Phys. Rev. D****87** (2013) **027702-1** ~ **4**.
- [168] **H. Nishino** and **S. Rajpoot**, “Supergravity as a Special Case of Local Nilpotent Fermionic Symmetry”, CSULB-PA-12-07, **Phys. Rev. D****88** (2013) **025035-1** ~ **9**
- [169] **H. Nishino** and **S. Rajpoot**, “N=1 Supersymmetric Non-Abelian Proca-Stueckelberg Mechanism for Extra Vector Multiplet”, **Nucl. Phys. B****887** (2014) **265** ~ **275**.
- [170] **H. Nishino** and **S. Rajpoot**, “Metric-Independent Measures for Supersymmetric Extended Object Theories on Curved Backgrounds”, published in **Phys. Lett. B****736** (2014) **350** ~ **355**.
- [171] **H. Nishino**, E. Guendelman, and **S. Rajpoot**, “Scale Symmetry Breaking from Total Derivative Densities and the Cosmological Constant Problem”, **Phys. Lett. B.** **732** (2014) **156** ~ **160**.
- [172] **H. Nishino** and **S. Rajpoot**, “Einstein-Cartan-Holst Action with Local Scale Invariance”, submitted to Jour. Math. Phys.
- [173] **H. Nishino** and **S. Rajpoot** , “Massive Interacting Vector Multiplets in Nine Dimensions”, Submitted to PRD.
- [174] **H. Nishino** and **S. Rajpoot**, “Extended Jackiw-Pi Model and Its Supersymmetrization”, **Phys. Lett.** **747B** (2015) **93**.
- [175] **H. Nishino** and **S. Rajpoot**, “Non-Abelian electric-magnetic duality with supersymmetry in 4D and 10D”, **Phys. Rev. D****92** (2015) **085014-1** ~ **9**.
- [176] **H. Nishino** and **S. Rajpoot**, “Supersymmetric EM-Duality in D=3+3 and D=5+5 as Foundation of Self-Dual Supersymmetric Yang-Mills Theory”, DOI: 10.1103/PhysRevD.93.105041, **Phys. Rev. D****93** (2016) **105041-1** ~ **13**.
- [177] **H. Nishino** and **S. Rajpoot**, CSULB-PA-15-05, “Supersymmetric Composite Gauge Fields with Compensators”, **Phys. Lett. B****757** (2016) **237-243**.
- [178] **H. Nishino**, E. Guendelman and **S. Rajpoot**, CSULB-PA-16-03 (October, 2016), “Two-Measure Approach to Breaking Scale-Invariance in a Standard-Model Extension”, **Phys. Lett.** **765B** (2017) **251** ~ **255**.
- [179] **H. Nishino**, E. Guendelman and **S. Rajpoot**, CSULB-PA-16-04 (October, 2016) “Small Vacuum Energy Density and Stable Vacuum from Dilaton-Gauss-Bonnet Coupling in Two Measure Theories”, **European Physical Journal** **77C** (2017) **240**.
- [180] **H. Nishino**, E. Guendelman and **S. Rajpoot**, CSULB-PA-16-05, “Two-Measure Theory with 3rd-Rank Antisymmetric Tensor for Local Scale Symmetry Breaking”, **Phys. Rev. D****95** (2017) **065002-1** ~ **6**.

- [181] **H. Nishino** and **S. Rajpoot**, CSULB-PA-17-01, “Supersymmetric Self-Dual Yang-Mills Theories from Local Nilpotent Fermionic Symmetry”, **Phys. Lett.** **772B** (2017) 731 ~ 736.
- [182] **H. Nishino** and **S. Rajpoot**, CSULB-PA-17-03 “ $N = (2, 0)$ Self-Dual Non-Abelian Tensor Multiplet in $D = 3 + 3$ Generates $N = (1, 1)$ Self-Dual Systems in $D=2+2$ ”, **Phys. Lett. B** **778** (2018) 256 ~ 262,
<https://doi.org/10.1016/j.physletb.2018.01.056>.
- [183] E. Guendelman, **H. Nishino** and **S. Rajpoot**, CSULB-PA-17-04, “Local Scale-Invariance Breaking in the Standard Model by Two-Measure Theory”, **Phys. Rev. D****98** (2018) 055022-1 ~ 9.
- [184] CSULB-PA-18-03 (December 2018) **H. Nishino** and **S. Rajpoot**, “Supersymmetric Cremmer-Scherk Theory” **Phys. Rev. D****100** (2019) 066021-1 ~ 19.
- [185] CSULB-PA-19-01 (February 2019) **H. Nishino** and **S. Rajpoot**, “Supersymmetric Non-Abelian Proca-Stueckelberg Theory in Six Space-Time Dimensions”, submitted to PRD on 02-11-19 (Ref. #: DB12022)