

CURRICULUM VITAE

Stefan Vandoren

Professor in Theoretical Physics

Utrecht University

PERSONAL DATA

- **Name:** VANDOREN STEFAN (male).
- **Nationality:** Belgian.
- **Address:** Institute for Theoretical Physics and Spinoza Institute
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- **E-mail:** S. J. G. Vandoren@uu.nl
- **Date of Birth:** 21/12/68, age 47.

ACADEMIC CAREER

- **Undergraduate Diploma:** University of Leuven, Belgium, 1990. Undergraduate thesis: *Unitary Highest Weight Representations of the Twisted $N=4$ Superconformal Algebra*. Supervisor: Prof. Antoine Van Proeyen.
- **PhD Degree:** Obtained, with highest distinction, at the University of Leuven, Belgium, December 1995, under the supervision of Prof. Antoine Van Proeyen. Title: *Covariant Quantisation in the Antifield Formalism*.
- **Post-doctoral Experience:**
1996-1999: University of Wales, Swansea, U.K..
1999-2001 : C.N. Yang Institute for Theoretical Physics, State University of New York, Stony Brook, USA.
- **Faculty Positions:**
2001-2007 : Assistant Professor, Institute for Theoretical Physics and Spinoza Institute, Utrecht University.
2007-2012 : Associate Professor, Institute for Theoretical Physics and Spinoza Institute, Utrecht University.
2012-....: Full Professor, Institute for Theoretical Physics, Utrecht University.
2012-....: Scientific Director, Institute for Theoretical Physics, Utrecht University.

ACADEMIC EXPERIENCE

- **Teaching Qualifications**

- "Basiskwalificatie Onderwijs" (BKO), Utrecht University, December 2002.
- "Seniorkwalificatie Onderwijs" (SKO), Utrecht University, April 2005.
- "Teacher of the Year", 1st place, Physics Department, UU, 2012.
- "Teacher of the Year", 3rd place, Bachelor Program, Physics Department, UU, 2013.
- "Teacher of the Year", 2nd place, 1st year Bachelor Program, 2016.

- **Teaching Experience - Bachelor and Master Program**

- 2015-2016: Module DITP Course on "Supergravity" (4 lectures)
- 2014-2017: Quantum Field Theory, Masters course in Theoretical Physics, Utrecht University.
- 2010-2017: Special Relativity, 1st year Bachelor Course in Physics, Utrecht University.
- 2013-2014: Student Seminar - Black Holes, Utrecht University
- 2012: A one-week course on "Topics in Quantum Mechanics", at the Utrecht Summer School in Theoretical Physics, August 2012.
- 2008-2012 : String Theory, Master course in Theoretical Physics, Utrecht.
- 2008-2009 : Riemannian Geometry, part II: complex manifolds, MRI Masterclass, Mathematics Institute, Utrecht.
- 2005-2008 : Quantum Mechanics II, 3rd year course in the physics Bachelor program, Utrecht University.
- 2004-2006: A course (together with Dr. F. Witte) on "Topics in Quantum Mechanics", at the Utrecht Summer School in Theoretical Physics.
- 2001-2005: Quantum Field Theory, Masters course in Theoretical Physics, Utrecht University.
- 1999: A course on "Solitons and Instantons" at the graduate level, SUNY Stony Brook, USA.
- 1998: A course on "General Relativity" at the undergraduate level, University of Swansea, Wales, U.K..

- **Mini-courses and Invited Series of Lectures at International Schools and Meetings**

- Lectures on "Non-perturbative aspects of gauge theory", Laces 2016, GGI Institute Firenze, December 2016.
- Lectures on "Geometry of Supergravity", String Steilkurs, Hamburg, Germany, July 20-24, 2015.
- Lectures on "Black Holes", at the Dutch AIO School for Theoretical High Energy Physics, Doorn, The Netherlands, 3-7 February, 2014.
- Lectures on "Black holes in four-dimensional anti-de Sitter space", at the String Theory Summer School, Cargèse, Corsica, 11-16 June, 2012.
- Lectures on "Instantons in Classical and Quantum Field Theory", at the Dutch AIO School for Theoretical High Energy Physics, Driebergen, The Netherlands, 1-5 February, 2010.
- Lectures on "Instantons in String Theory and Compactifications", at the 23rd Nordic Network Meeting, held at the Niels Bohr International Academy, Copenhagen, Denmark, April 15-20, 2009.
- Lectures on "Deformations of hyperkähler and quaternion-Kähler metrics", Hangzhou University, China, September 20-24, 2008.
- Lectures on "Instantons and String Theory", University of Milano, Italy, May 7-16, 2006.
- Lectures on "Field Theory", at the 16th Annual Graduate School of Particle Physics, Joint Belgian-Dutch-German Summer School, Gent, Belgium, September 6-17, 2004.
- Lectures on "Instantons in Gauge Theories", at the Dutch AIO School for Theoretical High Energy Physics, Nijmegen, The Netherlands, 27-31 January, 2003.
- Lectures on "Instantons in Supersymmetric Field Theories", at the National Summer School for Graduate Students "Grundlagen und neue Methoden der theoretischen Physik, Wolfersdorf, Germany, September 2-13, 2002.
- Lectures on "Solitons and Instantons", at the Institute for Intensive Theoretical Studies, September 2001, Leuven University, Belgium.
- Lectures on "Yang-Mills and D-Instantons", at the TMR School "Quantum aspects of gauge theories, supersymmetry and unification", January 26 - February 2, Turin, Italy, 2000.

- **Awards and Fundings**

- DITP Postdoc position, joint with A. Castro (UvA), 2year position, 2015-2016 (J. Gomes).
- NWO-Graduate Programme 2014. Main applicant. 4 PhD positions for the Institute for Theoretical Physics at Utrecht University (850.000 Euro).
- DITP Postdoc position, 2year position, 2014-2016 (Javier Magan).
- Co-applicant of the European COST-Network MP1210 "The String Theory Universe", member of the managing committee (PI: Silvia Penati), representative of the Netherlands (with Ana Achucarro).
- Co-applicant of the Delta-Institute for Theoretical Physics, NWO 2012-2021 (total budget: 18,5 ME),
- Honarary Fellow of the Science Faculty, University of Hasselt, Belgium, March 20, 2012.
- Vici Laureate, NWO, 2010-2016, *Geometrical Aspects of Superstring Theory* (4 post-docs, 3 PhD students).
- Participant and applicant in FOM National program on String Theory, 2010-2015, 2 postdocs.
- Foundations of Science, Focus & Mass Program, Utrecht University, 1 PhD student, plus one shared with Mathematics, 2010-2014.
- Recipient of the Descartes-Huygens price 2008 (23.000 Euro). Ceremony of the award at the KNAW, March 30, 2009.
- Inside FOM Program 57 (String Theory and Quantum Gravity), research grant 02STQG10, on "Instantons in String Theory" (1 PhD position, 2003-2007).

- **PhD Students**

Supervisor of current PhD Students: Watse Sybesma (September 2013 - 2017)
Navaneeth Gaddam (January 2013 - 2017), Nick Plantz (co-supervised with Henk Stoof, October 2014 - 2018).

Past PhD Students:

Marijn Davidse (January 2002 - 2006).

Mathijs de Vroome (June 2003 - 2007).

Hugo Looyestijn (October 2006 - 2010).

Kiril Hristov (September 2008 - 2012).

Chiara Toldo (October 2010 - 2014).

Vivian Jacobs (September 2011 - 2015) (2nd promotor, 1st promotor: Henk Stoof).

- **Other, teaching/education related experience**

- Tutor of first-year students of the Bachelor Program in Physics, 2011-2012, 2012-2013, 2013-2014, 2014-2015, and earlier in 2002-2003.

- Member of the admission committee for international students entering the Masters Program in Theoretical Physics, 2003 - 2007.

- 2007-2013: coordinator and chair of the admission committee.

- **Organization of Conferences, Schools and Workshops**

- Co-organizer and co-funder of the workshop "BOBS: black objects beyond supersymmetry", Utrecht, September 1-3, 2014. Website: <http://www.staff.science.uu.nl/gnecc001/BOBS.html>

- Organizer of the "Utrecht FOM String Meeting", A quantum approach to cosmology and quantum matter, June 14-15, 2013. Website: <https://sites.google.com/site/fomstring/>

- Co-organizer of "Toine60", meeting on the occasion of the 60th Birthday of Antoine Van Proeyen, Leuven, Belgium, March 16, 2013.

- Member of the local organizing committee of the conference "Integrability in Gauge and String Theory", Utrecht, August 19-23, 2013. [Main organizer: Gleb Arutyunov].

- Co-organizer, with B. Pioline, of the workshop "Advances in String Theory, Wall Crossing, and Quaternion-Kähler geometry", IHP Paris, August 30 - September 3, 2010.

- Co-organizer of the Amsterdam Summer Workshop on String Theory, June 28 - July 9, 2010.

- Member of the local organizing committee of the conference "Integrability in Gauge and String Theory", Utrecht, August 11-15, 2008. [Main organizer: Gleb Arutyunov].

- The "B-Fest", an international meeting on the occasion of the 60th Birthday of Bernard de Wit, Conference centre "De Bergse Bossen", Driebergen, Utrecht, May 27-28, 2005. Organized by Eric Bergshoeff, Stefan Vandoren, Jan-Willem van Holten and Antoine Van Proeyen.

- Co-organizer (with Eric Laenen) of the Dutch AIO-School for PhD Students, January 2005.
 - Co-organizer of the European Workshop of the RTN “The quantum structure of spacetime and the geometric nature of fundamental interactions”, September 13-19, Leuven, Belgium. Co-editor of the proceedings that appeared in *Class. Quant. Grav.* **20** (2003), Nr. 12.
 - The “European Winterschool” of the RTN network “The quantum structure of spacetime and the geometric nature of fundamental interactions”, January 17-22, 2002, Utrecht, The Netherlands, co-organized with B. de Wit. Co-editor of the proceedings that appeared in *Class. Quant. Grav.* **19** (2002), Nr. 22.
- **Other**
 - Co-organizer of joint seminar Maths and Physics seminar program, 2005-2012.
 - Member of the Program Committee for the meeting “Trends in Theory 2007”, organized by the Dutch Research School of Theoretical Physics, Dalfsen, May 30, 2007.
 - Responsible for the book collection in the library for theoretical physics.
- **International Collaborations: past and present**
 - King’s College, London, UK: Sameer Murthy
 - Harvard University, USA: Babak Haghighat, Cumrun Vafa
 - Harvard University, USA: Oscar Varela
 - University of Leuven, Belgium: Alessandra Gneccchi
 - University of Milan, Bicocca: Kiril Hristov
 - University of Bonn, Germany: Jan Manschot
 - Harvard University, USA: Babak Haghighat
 - CERN, Geneva, Switzerland: Umut Gürsoy
 - Université Pierre et Marie Curie, and ENS, Paris, France: Boris Pioline
 - IAS, Princeton, USA: Andy Neitzke
 - Saclay, Paris, France: Frank Saueressig
 - Harvard University, USA: Cumrun Vafa
 - SUNY at Stony Brook, USA: Martin Roček, Peter van Nieuwenhuizen
 - Montpellier University II, France: Sergei Alexandrov
 - Jena University, Germany: Ulrich Theis
 - Leuven University, Belgium: Antoine Van Proeyen
 - King’s College, London, UK: Ulf Gran

- Michigan University, USA: Lilia Anguelova
- Swansea University, UK: Nick Dorey, Tim Hollowood, Dave Tong
- Durham University, UK: Valya Khoze
- Los Alamos, USA: Michael Mattis
- Imperial College, London, UK: Kris Thielemans

- **Invited Seminars and Talks (2003-...)**

2014:

- *Black Holes, Quantum Gravity and String Theory*, invited colloquium in Surrey, UK, November 28, 2014.
- *Holography with small $N=4$* , invited talk, Conference "Holographic methods and applications", Reykjavik, August 18-22, 2014.
- *Entropy of asymptotically flat black holes in gauged supergravity*, invited talk, Conference, "Recent Developments in String Theory", Ascona, Switzerland, July, 21-25, 2014.
- *Holographic interaction effects on transport in Dirac Semimetals*, invited talk, workshop "Applications of gauge/gravity duality", Gothenburg, Sweden, June 2-4, 2014.
- *Black Holes in String Models with Spontaneous Supersymmetry Breaking*, invited talk, Padova University, Italy, May 28, 2014.
- *Holographic descriptions of Weyl and Dirac Semimetals*, invited talk, workshop "Holography, gauge theory and black holes", Southampton, UK, April 9-11, 2014.
- *Holographic interaction effects on transport in Dirac Semimetals*, invited talk, Crete University, Greece, March 20, 2014.
- *Black Holes in String Models with Spontaneous Supersymmetry Breaking*, invited talk, University of Milan Bicocca, Italy, March 5, 2014.
- *Black Holes in String Models with Spontaneous Supersymmetry Breaking*, invited talk, conference "Quantum Information and Black Holes", Weizmann Institute, Rehovot, Israel, January 17, 2014.
- *Black Holes and Gauged Supergravity*, invited talk, Stony Brook, NY, USA, January 8, 2014.

2013:

- *Black Holes and Supersymmetry Breaking*, invited talk, Nikhef, November 21, 2013.
- *Weyl Semimetals, conductivity, and holography*, invited talk, Workshop on AdS/CMT, Newton Institute, Cambridge, October 11, 2013.
- *Black holes in AdS₄, scalar hair and phase transitions*, invited talk, Barcelona, Spain, September 26, 2013.
- *Phase transitions of magnetic AdS₄ black holes with scalar hair*, invited talk, ICTP/SISSA, Trieste, Italy, April 14, 2013.
- *New goals for black holes*, invited talk, Dutch Research School for Theoretical Physics (DRSTP), Nikhef, March 1, 2013

2012:

- *“Building Bridges”: From String Theory to Condensed Matter*, Theory Colloquium, Utrecht University, November 10, 2012.
- *Lifshitz holography for undoped Weyl semimetals*, invited talk, University of Amsterdam, October 23, 2012.
- *Lifshitz holography for undoped Weyl semimetals*, invited talk, Nordita Conference “The Holographic Way”, Stockholm, October 16, 2012.
- *Lifshitz holography for undoped Weyl semimetals*, research seminar, Groningen, October 1, 2012.
- *A “5d/2d/4d” correspondence*, invited talk, Ahrenshoop meeting, Berlin, August 27-31, 2012.
- *Black holes in four-dimensional anti-de Sitter space*, see “invited lectures” (Cargèse summer school, June 2012).
- *BPS black holes and BPS bounds in N=2 D=4 gauged supergravity*, invited talk, Hamburg, Germany, April 2, 2012.
- *M5 branes, 4d/2d correspondence, and 5D SYM compactified on a torus*, Newton Institute, Cambridge, January 18, 2012.

2011:

- *Five-dimensional gauge theory and compactification on a torus*, invited talk, Simons Center, Stony Brook, NY, December 5, 2011.
- *Five-dimensional gauge theory and compactification on a torus*, invited talk, Nordita workshop, Stockholm, November 16, 2011.

- *Quaternion-Kähler manifolds from the variation of Hodge structures*, invited conference talk, Geometric structures in mathematical physics, Varna, Bulgaria, September 20, 2011.
- *Black holes and black branes in Lifshitz spacetimes*, invited seminar, Niels Bohr institute, Copenhagen, June 9, 2011.
- *Phase diagrams and thermodynamics of Lifshitz black holes*, invited seminar, Solvay meeting, Brussels, May 20, 2011.
- *Static supersymmetric black holes in AdS_4 with spherical symmetry*, invited talk, Leuven-Brussels, ULB Bruxelles, February 16, 2011.
- *BPS black holes in AdS_4* , invited conference seminar, String theory conference, Puri, India, January 4-9, 2011.

2010:

- *Supersymmetric black holes in gauged supergravity*, invited talk, ETH Zurich, Switzerland, May 12, 2010.
- *Instantons and quaternion-Kähler geometry*, invited talk, Lisbon, Portugal, June 14, 2010.
- *BPS Black Holes in gauged $N=2$ $D=4$ Supergravities*, research seminar at the Ahrenshoop meeting Recent Developments on String/M Theory and Field Theory, Berlin, August 23-27, 2010.
- *Quaternion-Kähler geometry from String Theory*, invited research seminar DAMTP, Cambridge, UK, November 23, 2010.

2009:

- *Resumming D -instantons in string theory*, research seminar at the University of Montpellier, France, November 26, 2009.
- *Large D -instanton effects in string theory*, research seminar at University Pierre et Marie Curie, Paris, France, November 9, 2009.
- *D -instantons from twistor geometry*, research seminar at the IHES, Bures sur Yvettes, Paris, France, October 29, 2009.
- *$N=2$ Gauged Supergravity and Compactifications of String Theory*, research seminar at the conference A New Year of String Theory, 100 years of Tel Aviv, Tel Aviv, Israel, September 21-25, 2009.
- *Quaternion-Kähler Geometry and String Theory*, Mathematics Colloquium, Utrecht University, May 28, 2009.

- *Nonperturbative effects in string theory*, Joint Seminar VUB, ULB and KUL, Brussels, Belgium, April 22, 2009.
- *Instanton corrections from twistor geometry*, Research Seminar, University of Amsterdam (UvA), February 3 2009.
- *D-instantons and twistors*, Triangle Seminar, London (Imperial Collge, Queen Mary, and Kings College), London, U.K., January 28, 2009.

2008:

- *D-instantons and twistors*, research seminar at Trinity College, Dublin, Ireland, November 17 2008.
- *Instanton corrections to hypermultiplet moduli spaces*, research seminar at the conference “Geometrical aspects of String Theory”, Stockholm, Sweden, October 20-24 2008.
- *Deformations of hyperkähler and quaternion-Kähler metrics*, mini-course given in Hangzhou, China, September 20-24 2008.
- *Linear deformations of quaternion-Kähler manifolds*, International conference on Holonomy Groups and Applications in String Theory, Hamburg University, July 11-14 2008, Hamburg, Germany.
- *Instanton corrections to hypermultiplet moduli spaces*, research seminar at Bonn University, April 22 2008, Bonn, Germany.
- *String theory: perturbative and nonperturbative aspects*, Landelijk Seminarie Nikhef, April 11 2008, Amsterdam, The Netherlands.
- *On NS5-brane instantons and volume stabilization*, research seminar at “String theory in Greater Paris”, April 3 2008, Paris, France.
- *On volume stabilization and NS5-brane instantons*, research seminar Niels Bohr Institute, February 6 2008, Copenhagen, Denmark.

2007:

- *Instantons in $N=2$ $D=4$ string compactifications*, workshop on string effective actions and D-instantons, Max Planck Institute, Munich, November 14 2007, Munich, Germany.
- *NS5-brane instantons and volume stabilization*, research seminar Torino university, October 25 2007, Torino, Italy.

- *Nonperturbative string theory and the cosmological constant*, Ehrenfest colloquium Leiden, October 10 2007, Leiden, The Netherlands.
- *Membrane instantons from mirror symmetry*, International conference on symmetries of string theory, Ascona, August 31, Ascona, Switzerland.
- *Black Holes and Twistors*, Workshop on black holes and automorphic forms, ENS Paris, August 24 2007, Paris, France.
- *A report on the Strings 2007 conference*, Grafiti Seminar in Utrecht, July 2 2007, Utrecht, The Netherlands.
- *Instanton corrections to hypermultiplet moduli spaces*, Workshop on string and M-theory approaches to particle physics and cosmology, Galileo Galilei Institute, Florence, May 8 2007, Florence, Italy.
- *Exact results in four-dimensional nonperturbative string theory*, research seminar, Swansea University, March 9 2007, Swansea, Wales, UK.
- *Orientifolding in $N=2$ superspace*, Workshop on Generalized Geometry and Flux Compactifications, Feb 21st 2007, Hamburg, Germany.

2006:

- *Some exact results in four-dimensional non-perturbative string theory*, Grafiti Seminar, Utrecht University, The Netherlands, December 11, 2006.
- *Summing instanton corrections to four-dimensional superstrings*, String theory Seminar, Amsterdam (UvA), The Netherlands, November 7, 2006.
- *Exact Results in non-perturbative four-dimensional superstrings*, European RTN meeting, Napoli, Italy, October 13, 2006.
- *Ultracold Superstrings*, Cosmolab Meeting, Leiden, The Netherlands, September 7, 2006.
- *Aspects of Hypermultiplet Moduli Spaces*, Simons Workshop in Stony Brook, New York, USA, August 18, 2006.
- *Instantons and black hole solutions in supergravity*, Freiburg University, Germany, June 29, 2006.
- *Quaternionic-Kähler geometry and Instantons*, Oxford, U.K., June 12, 2006.
- *Hypermultiplet moduli spaces and topological strings*, ICTP Trieste, Italy, June 6, 2006.
- *Non-extremal D-instantons and the AdS/CFT correspondence*, Hebrew University, Jerusalem, Israel, May 30, 2006.

- *De Sitter vacua from string theories*, Invited talk at “Cosmology, Strings, and Black Holes”, Copenhagen, Denmark, April 18-21, 2006.
- *Nonperturbative effects in supergravity and string theory*, Plenary talk at “Beyond the Standard Model”, Bad Honnef, Germany, March 13-16, 2006.
- *Quantum corrections to hypermultiplet moduli spaces*, Weizmann Institute, Rehovot, Israel, February 6, 2006.
- *Quaternionic manifolds from Special Kähler geometry*, joint Phys-Math Seminar, February 3, 2006, Utrecht, The Netherlands.

2005:

- *Non-extremal D-instantons and the AdS/CFT correspondence*, Institute Henri Poincaré, December 8, 2005, Paris, France.
- *On de Sitter vacua in type IIA orientifold compactifications*, Sommerfeld Institute Munich, November 24, 2005, Munich, Germany.
- *Applications of quaternionic geometry in string theory*, Seminar at the conference “Rencontres entre Physiciens théoriciens et Mathématiciens”, September 24, 2005, Strasbourg, France.
- *Instantons and vacua of string theories*, July 25, 2005, Albert Einstein Institute, Potsdam, Germany.
- *Ultracold Superstrings*, July 27, 2005, Albert Einstein Institute, Potsdam, Germany.
- *Ultracold Superstrings*, Theoretical Physics Colloquium, July 6, 2005, University of Jena, Germany.
- *Ultracold Superstrings*, General Physics Colloquium (in combination with Henk Stoof), June 24, 2005, Utrecht University, The Netherlands.
- *Membrane Instantons and de Sitter vacua*, May 23, 2005, Utrecht University, The Netherlands.
- *Non-extremal D-instantons*, March 17, 2005, Swansea, University of Wales, Wales.

2004:

- *Hypermultiplet moduli spaces and topological strings*, String theory seminar, UvA Amsterdam, NL, October 8th, 2004.
- *Nonextremal D-instantons*, Seminar at the 2004 RTN Workshop on the quantum structure of spacetime, Kolymbari, Greece, September 5-10, 2004.
- *Quantum corrections and hypermultiplet moduli spaces*, Seminar at the second

Simons workshop on topological string theory, Stony Brook, NY, USA, July 26 - August 27, 2004.

- *Instantons, wormholes and black holes*, Utrecht University, The Netherlands, June 21, 2004.

- *Nonextremal D-instantons*, Torino University, Italy, May 25th, 2004.

- *Instantons in string theory*, Cambridge University, UK, May 5, 2004.

- *Fivebrane instantons in $N=2$ $D=4$ supergravity*, University of Brussels, Belgium, April 21, 2004.

2003:

- *Nonperturbative string theory*, Colloquium at the University of Amsterdam, December 18, 2003.

- *Fivebrane instantons*, E. Schrödinger Institute, Vienna, Austria, December 9, 2003.

- *Instanton solutions for the universal hypermultiplet*, at the Ahrenshoop meeting on the Theory of Elementary Particles, Berlin, Germany, August 26-30, 2003.

- *Nonperturbative effects in type II strings on Calabi-Yau manifolds*, at the Simons Workshop in Mathematics and Physics, Stony Brook, NY, USA, August 11-15, 2003.

- *Quantum corrections to the universal hypermultiplet*, at the Superstring Theory Network Meeting, Casa Bianca, Tuscany, Italy, April 8-12, 2003.

- *Instantons in $N=2$ Supergravity*, at the Workshop on Gauge Fields and Strings, Jena, Germany, February 25 - March 1, 2003.

• **Participation in Committees**

- Chair of the job search committee Theoretical Physics, Utrecht University, 2014 (Full Professor in Theoretical Physics).

- External member of the job search committee Theoretical Physics, University of Amsterdam, 2012 and 2013 (Faculty positions in String Theory).

- Member of the "Onderzoeksaviesraad"; Research advise board of the Science Faculty, Utrecht University.

- Member of the job search committee Theoretical Physics, Utrecht University, 2012 and 2013 (Tenure track positions in Condensed Matter and String Cosmology).

- Board member (as scientific director of the Institute for Theoretical Physics) of Department and Science Faculty meetings, 2012-2015.

- Referee Wallenberg Academy Fellows, Sweden, 2013.
 - External member of Faculty search committee Theoretical Physics, Groningen, 2010.
 - Jurymember of FOM Projectruimte, Vernieuwingsimpuls, 2011, 2008.
 - Member of the Vidi selection committee, NWO, 2010.
 - Chair of the admission committee for international students entering the Masters Program in Theoretical Physics.
 - Member of the FOM-network “Theoretical High Energy Physics”.
- **Press and public outreach**
 - *“De Kosmos”*, question and answer session on “The Big Ideas - The Kosmos”, for students in Social Sciences and Philosophy, Utrecht, December 19, 2014.
 - *Speciale Relativiteitstheorie en de Large Hadron Collider*, Masterclass Einstein, Utrecht University, October 29, 2014.
 - *Plancks 2014*, host of the public event (Speakers: Gerard 't Hooft, Immanuel Bloch, Stephen Hawking), May 23, 2014, Beatrix Theater, Utrecht. See <https://www.youtube.com/watch?v=4XAB-GQPdMk>, for a summary video.
 - *Kijk! terug in de tijd*, public talk for “Kijk Live”, 15 April 2014. For the video and summary report, see <http://www.kijkmagazine.nl/nieuws/kijk-live-terug-tijd-oerknal/>. On youtube, see <https://www.youtube.com/watch?v=kTNUik-to8M>.
 - *De dimensie tijd*, participation in the VPRO, Labyrint program on “Time”, Ned2, December 8, 2013.
 - *Zwarte gaten*, Open Days, Utrecht University, November 23, 2013.
 - *The LHC and Special Relativity*, Masterclass, Utrecht University, October 22, 2013.
 - *Tijd in Machten van tien*, invited talk, Science Cafe, Eindhoven, 23 maart, 2013.
 - *Tijd in Machten van tien*, invited talk, Senioren Universiteit Hasselt, 22 maart, 2013.
 - *Black Holes and String Theory*, seminar for student union ASKwadraat, Utrecht, February 20, 2013.
 - *Op zoek naar de oerknal*, voorlichtingsdagen Bachelor opleiding Natuur en Sterrenkunde, Utrecht, 24 November 2012.

- *Speciale Relativiteitstheorie en de Large Hadron Collider*, Masterclass, Utrecht University, June 18 2012.
- *Snaartheorie en zwarte gaten*, student lunch talk, Utrecht University, May 16, 2012.
- *Tijd in machten van tien*, voordracht Scholierensymposium HISPARC, Leiden, 5 April 2012.
- *Tijd in machten van tien*, voordracht Universiteit Hasselt, 20 maart 2012.
- *Speciale Relativiteitstheorie*, voordracht voor de Woudschoten Natuurkunde Didactiek Conferentie, 17 December 2011.
- VPRO Radio uitzending "Labyrinth" rond het onderwerp "Tijd", naar aanleiding van het boek "Tijd in machten van tien", G. 't Hooft en S. Vandoren, 20 November 2011.
- Debatprogramma "Cover Discoveries", panel discussie tussen pers en wetenschappers, met medewerking van NRC en Volkskrant, AUC Amsterdam, 8 November 2011.
- *Neutrino's sneller dan het licht ?* Artikel in Vakidoot, Studentenblad Wis- en Natuurkunde, Oktober 2011.
- Publicatie van het boek "*Tijd in machten van tien*", Uitgeverij Veen Magazines, Augustus 2011, ISBN 9085712432. Recensies in vele Nederlandse kranten.
- Public lecture, *Op zoek naar de oerknal*, November 29, 2010, Cultureel Centrum de Kimpel, Bilzen, België.
- *Snaartheorie*, invited lecture for the Rotary Club Haarlem, 13 Oktober, 2010.
- Deelname "De Avond van Wetenschap en Maatschappij", 10e en 11e avond; thema-avond ter bevordering van de integratie van wetenschap in de maatschappij, 2009 en 2010, Ridderzaal, Den Haag.
- Interview, "Nieuwsgierigheid is de drijfveer van mijn carrière", in Universiteit Hasselt Magazine, nr 4., jaargang 4, 2009.
- Radio-interview, Radio 1, België: "Bilzenaar wint Descartes-Huygensprijs", 31 Maart 2009, <http://www.radio1.be/programmas/ochtend/bilzenaar-wint-descartes-huygensprijs>.
- "L'accord de la corde: string theory in harmony", voordracht, Trippenhuis, KNAW, 30 Maart 2009.

- "String Theory Unification of Particle Physics and Cosmology", openingsvoordracht voor het Marie-Curie Symposium "Heilige Gralen in de Fysica", R.U.Nijmegen, 20 Maart 2009.
- "Op zoek naar een theorie van Alles", in VOX, Universiteits Magazine R.U.Nijmegen, nr. 14, 19 Maart 2009.
- Radio-interview, VPRO, Radio 1, Programma Noorderlicht, 17 Maart 2009, <http://noorderlicht.vpro.nl/afleveringen/41228450/>
- "Op zoek naar de oerknal", voorlichtingsdagen Bachelor opleiding Natuur en Sterrenkunde, Utrecht, 28 November 2008.
- "Op weg naar de Theorie van Alles", U-blad Universiteit Utrecht, 6 November 2008 nr. 07.
- "Snaren op de labtafel", in kennislink, 22 December 2005, <http://www.kennislink.nl/web/show?id=143680>.
- "Echte snaartheorie uit Utrechtse diepvries", in de Volkskrant, Weekend editie, 19 November 2005.
- "Ingevroren Superstring", in kennislink, 12 Mei 2005, <http://www.kennislink.nl/web/show?id=131551>.
- "A recipe for making strings in the lab", in Physicsweb, May 11, 2005, <http://physicsweb.org/articles/news/9/5/7/1>.

PUBLICATION LIST

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PUBLICATIONS

- **Citation Analysis**

Theoretical High Energy Physicists use bibliometrical data from "INSPIRE" (<http://inspirehep.net/>). From these data, one finds, date, December 31, 2015:

- Total number of citations in published journals: **2198**.
- Average citation per paper: **32,8**.
- h-index: **29**.

- **Refereed Journals**

62) Rhology, Black Holes and Scherk-Schwarz.

N. Gaddam, A. Gnechchi, S. Vandoren and O. Varela,
arXiv:1412.7325 [hep-th].

61) Holographic interaction effects on transport in Dirac semimetals.

V. Jacobs, S. Vandoren and H. Stoof,
Phys. Rev. B **90** (2014) 045108 [arXiv:1403.3608 [cond-mat.str-el]].

60) Phase transitions of magnetic AdS₄ black holes with scalar hair.

K. Hristov, C. Toldo and S. Vandoren,
Phys. Rev. D **88** (2013) 026019, e-Print: arXiv:1304.5187 [hep-th].

59) A 5d/2d/4d correspondence.

B. Haghshat, J. Manschot and S. Vandoren,
JHEP **1303** (2013) 157, e-Print: arXiv:1211.0513 [hep-th].

58) Holographic models for undoped Weyl semimetals.

U. Gursoy, V. Jacobs, E. Plauschinn, H. Stoof and S. Vandoren,
JHEP **1304** (2013) 127, e-Print: arXiv:1209.2593 [hep-th].

57) Static nonextremal AdS₄ black hole solutions.

Chiara Toldo, Stefan Vandoren (Utrecht U.).
Published in JHEP 1209 (2012) 048, e-Print: arXiv:1207.3014 [hep-th]

56) Black branes in AdS: BPS bounds and asymptotic charges.

Kiril Hristov, Chiara Toldo, Stefan Vandoren,
Published in Fortsch.Phys. 60 (2012) 1057-1063, e-Print: arXiv:1201.6592 [hep-th]

55) Holography and ARPES Sum-Rules.

Umut Gursoy, Erik Plauschinn, Henk Stoof, Stefan Vandoren,
Published in JHEP 1205 (2012) 018, e-Print: arXiv:1112.5074 [hep-th]

- 54) On BPS Bounds In D=4 N=2 Gauged Supergravity.
Kiril Hristov, Chiara Toldo, Stefan Vandoren,
Published in JHEP 1112 (2011) 014, e-Print: arXiv:1110.2688 [hep-th].
- 53) Five-Dimensional Gauge Theory and Compactification On A Torus.
Babak Haghighat, Stefan Vandoren,
Published in JHEP 1109 (2011) 060, e-Print: arXiv:1107.2847 [hep-th].
- 52) Black Holes and Black Branes In Lifshitz Spacetimes.
Javier Tarrío, Stefan Vandoren,
Published in JHEP 1109 (2011) 017, e-Print: arXiv:1105.6335 [hep-th].
- 51) Static supersymmetric black holes in AdS₄ with spherical symmetry.
Kiril Hristov, Stefan Vandoren,
Published in JHEP 1104 (2011) 047, e-Print: arXiv:1012.4314 [hep-th].
- 50) New potentials from Scherk-Schwarz reductions.
Hugo Looyestijn, Erik Plauschinn, Stefan Vandoren,
Published in JHEP 1012 (2010) 016, e-Print: arXiv:1008.4286 [hep-th].
- 49) BPS black holes in N=2 D=4 gauged supergravities.
Kiril Hristov, Hugo Looyestijn, Stefan Vandoren,
Published in JHEP 1008 (2010) 103 e-Print: arXiv:1005.3650 [hep-th].
- 48) Self-dual Einstein Spaces, Heavenly Metrics and Twistors.
Sergei Alexandrov, Boris Pioline, Stefan Vandoren,
Published in J.Math.Phys. 51 (2010) 073510, e-Print: arXiv:0912.3406 [hep-th]
- 47) MAXIMALLY SUPERSYMMETRIC SOLUTIONS OF D=4 N=2 GAUGED SUPERGRAVITY.
Kiril Hristov, Hugo Looyestijn, Stefan Vandoren,
JHEP 0911:115, 2009, arXiv:0909.1743 [hep-th].
- 46) LARGE D-INSTANTON EFFECTS IN STRING THEORY.
Boris Pioline and Stefan Vandoren, JHEP 0907:008, 2009, arXiv: 0904.2303 [hep-th].
- 45) D-INSTANTONS AND TWISTORS.
Sergei Alexandrov (Montpellier U., Astropart. Group), Boris Pioline (Paris, LPTHE and Ecole Normale Superieure), Frank Saueressig (Saclay), Stefan Vandoren (Utrecht U.), JHEP 0903:044, 2009, arXiv:0812.4219 [hep-th].
- 44) LINEAR PERTURBATIONS OF QUATERNIONIC METRICS.
Sergei Alexandrov (Montpellier U., Astropart. Group), Boris Pioline (Paris,

LPTHE and Ecole Normale Superieure), Frank Saueressig (Saclay), Stefan Vandoren (Utrecht U.), to appear in Communications of Mathematical Physics, [arXiv:0810.1675 \[hep-th\]](#).

43) LINEAR PERTURBATIONS OF HYPERKAHLER METRICS.

Sergei Alexandrov (Montpellier U.), Boris Pioline (Paris, LPTHE and ENS), Frank Saueressig (Saclay), Stefan Vandoren (Utrecht U.), *Lett. Math. Phys.* 87: 225-265, 2009, [arXiv:0806.4620 \[hep-th\]](#).

42) ON NS5-BRANE INSTANTONS AND VOLUME STABILIZATION.

Hugo Looyestijn, Stefan Vandoren, *JHEP* 0804:024, 2008, [arXiv:0801.3949 \[hep-th\]](#).

41) MEMBRANE INSTANTONS FROM MIRROR SYMMETRY.

Daniel Robles-Llana, Frank Saueressig (Utrecht U.), Ulrich Theis (Jena U., TPI), Stefan Vandoren (Utrecht U.), *Comm. Numb. Theor. Phys.* 1 (2007) 681, [arXiv:0707.0838 \[hep-th\]](#).

40) CONIFOLD SINGULARITIES, RESUMMING INSTANTONS AND NON-PERTURBATIVE MIRROR SYMMETRY.

Frank Saueressig, Stefan Vandoren (Utrecht U.), *JHEP* 0707:018, 2007, [arXiv:0704.2229 \[hep-th\]](#).

39) TWISTORS AND BLACK HOLES.

Andrew Neitzke (Princeton, Inst. Advanced Study), Boris Pioline (Paris, LPTHE and Ecole Normale Superieure), Stefan Vandoren (Utrecht U.), *JHEP* 0704:038, 2007, [hep-th/0701214](#).

38) NONPERTURBATIVE CORRECTIONS TO 4D STRING THEORY EFFECTIVE ACTIONS FROM $SL(2, Z)$ DUALITY AND SUPERSYMMETRY.

Daniel Robles-Llana (Utrecht U.), Martin Rocek (SUNY, Stony Brook), Frank Saueressig (Utrecht U.), Ulrich Theis (Jena U., TPI), Stefan Vandoren (Utrecht U.), *Phys. Rev. Lett.* 98:211602, 2007, [hep-th/0612027](#).

37) SUPERGRAVITY DESCRIPTION OF SPACETIME INSTANTONS.

Mathijs de Vroome, Stefan Vandoren (Utrecht U.), *Class. Quant. Grav.* 24 (2007) 509, [hep-th/0607055](#).

36) MEMBRANE AND FIVEBRANE INSTANTONS FROM QUATERNIONIC GEOMETRY.

By Sergei Alexandrov (Montpellier U.), Frank Saueressig, Stefan Vandoren (Utrecht U.), *JHEP* 0609:040, 2006, [hep-th/0606259](#).

35) THEORY OF ULTRACOLD SUPERSTRINGS.

By Michiel Snoek, S. Vandoren, H.T.C. Stoof (Utrecht U.), Phys. Rev. A74 033607, 2006, [cond-mat/0604671](#).

34) STRING LOOP CORRECTED HYPERMULTIPLY MODULI SPACES.

By Daniel Robles-Llana, Frank Saueressig, Stefan Vandoren (Utrecht U.), JHEP 0603:081, 2006, [hep-th/0602164](#).

33) HYPERMULTIPLY AND TOPOLOGICAL STRINGS.

By Martin Rocek (SUNY, Stony Brook), Cumrun Vafa (Harvard U.), Stefan Vandoren (Utrecht U.), JHEP 0602:062, 2006, [hep-th/0512206](#).

32) NON-EXTREMAL D-INSTANTONS AND THE ADS/CFT CORRESPONDENCE.

By Eric Bergshoeff, Andres Collinucci, Andre Ploegh (Groningen U.), Stefan Vandoren (Utrecht U.), Thomas Van Riet (Groningen U.), JHEP 0601:061, 2006, [hep-th/0510048](#).

31) ON DE SITTER VACUA IN TYPE IIA ORIENTIFOLD COMPACTIFICATIONS.

By Frank Saueressig (Utrecht U.), Ulrich Theis (Jena U., TPI), Stefan Vandoren (Utrecht U.), Phys. Lett. B633:125-128, 2006, [hep-th/0506181](#).

30) MEMBRANE INSTANTONS AND DE SITTER VACUA.

By Marijn Davidse, Frank Saueressig (Utrecht U.), Ulrich Theis (Jena U., TPI), Stefan Vandoren (Utrecht U.), JHEP 0509:065, 2005, [hep-th/0506097](#).

29) ULTRACOLD SUPERSTRINGS.

By Michiel Snoek, Masudul Haque, S. Vandoren, H.T.C. Stoof (Utrecht U.), Phys. Rev. Lett. 95, (2005) 250401, [cond-mat/0505055](#).

28) THE MAP BETWEEN CONFORMAL HYPERCOMPLEX/HYPERKAHLER AND QUATERNIONIC(-KAHLER) GEOMETRY.

By Eric Bergshoeff (Groningen U.), Sorin Cucu (Leuven U.), Tim de Wit (Groningen U.), Jos Gheerardyn (Leuven U., Turin U. and INFN, Turin), Stefan Vandoren (Utrecht U.), Antoine Van Proeyen (Leuven U.), Commun. Math. Phys. 262:411-457, 2006, [hep-th/0411209](#).

27) NON-EXTREMAL D-INSTANTONS.

By E. Bergshoeff, A. Collinucci (Groningen U.), U. Gran (King's Coll., London), D. Roest (Groningen U.), S. Vandoren (Utrecht U.), JHEP 0410:031, 2004, [hep-th/0406038](#).

26) FIVEBRANE INSTANTON CORRECTIONS TO THE UNIVERSAL HYPERMULTIPLY.

By Marijn Davidse (Utrecht U.), Ulrich Theis (Vienna, Tech. U.), Stefan Vandoren (Utrecht U.), Nucl. Phys. B697 (2004) 48, [hep-th/0404147](#).

25) $N = 2$ SUPERGRAVITY IN FIVE-DIMENSIONS REVISITED.

By Eric Bergshoeff (Groningen U.), Sorin Cucu (Leuven U.), Tim de Wit (Groningen U.), Jos Gheerardyn (Leuven U.), Stefan Vandoren (Utrecht U.), Antoine Van Proeyen (Leuven U.), Class. Quant. Grav. 21 (2004) 3015, [hep-th/0403045](#).

24) QUANTUM CORRECTIONS TO THE UNIVERSAL HYPERMULTIPLY AND SUPERSPACE.

By Lilia Anguelova (Michigan U., MCTP), Martin Rocek (SUNY, Stony Brook), Stefan Vandoren (Utrecht U.), Phys. Rev. D70 (2004) 066001, [hep-th/0402132](#).

23) INSTANTON SOLUTIONS FOR THE UNIVERSAL HYPERMULTIPLY.

Marijn Davidse, Mathijs de Vroome, Ulrich Theis, Stefan Vandoren, Fortsch. Phys. 52:696-701, 2004, [hep-th/0309220](#).

22) $N=2$ SUPERSYMMETRIC SCALAR TENSOR COUPLINGS.

By Ulrich Theis (Vienna, Tech. U.), Stefan Vandoren (Utrecht U.), JHEP 0304:042,2003, [hep-th/0303048](#).

21) INSTANTONS IN THE DOUBLE TENSOR MULTIPLY.

By Ulrich Theis, Stefan Vandoren (Utrecht U.), JHEP 0209:059,2002, [hep-th/0208145](#).

20) SUPERCONFORMAL $N=2$, $D = 5$ MATTER WITH AND WITHOUT ACTIONS.

By Eric Bergshoeff (Groningen U.), Sorin Cucu (Leuven U.), Tim De Wit (Groningen U.), Jos Gheerardyn (Leuven U.), Rein Halbersma (Groningen U.), Stefan Vandoren (Utrecht U.), Antoine Van Proeyen (Leuven U.), JHEP 0210:045,2002, [hep-th/0205230](#).

19) HYPERKAHLER CONES AND ORTHOGONAL WOLF SPACES.

By Lilia Anguelova, Martin Rocek (SUNY, Stony Brook), Stefan Vandoren (Utrecht U.), JHEP 0205:064,2002, [hep-th/0202149](#).

18) GAUGING ISOMETRIES ON HYPERKAHLER CONES AND QUATERNION KAHLER MANIFOLDS.

By Bernard de Wit (Utrecht U.), Martin Rocek, Stefan Vandoren (SUNY, Stony Brook), Phys. Lett. B511 (2001) 302, [hep-th/0104215](#).

17) HYPERMULTIPLETS, HYPERKAHLER CONES AND QUATERNIONIC GEOMETRY.

By B. de Wit (Utrecht U.), M. Roček and S. Vandoren (SUNY, Stony Brook), JHEP 0102:039,2001, [hep-th/0101161](#).

16) NEW INSTANTONS IN THE DOUBLE-WELL POTENTIAL.

By S. Vandoren and P. van Nieuwenhuizen (SUNY, Stony Brook), Phys. Lett. B499 (2001) 280, [hep-th/0010130](#).

15) YANG-MILLS- AND D-INSTANTONS.

By A. Belitsky, S. Vandoren and P. van Nieuwenhuizen (SUNY, Stony Brook), Class. Quantum. Grav. 17 (2000) 3521, [hep-th/0004186](#).

14) INSTANTONS, EUCLIDEAN SUPERSYMMETRY AND WICK ROTATIONS.

By A. Belitsky, S. Vandoren and P. van Nieuwenhuizen (SUNY, Stony Brook), Phys. Lett. B477 (2000) 335, [hep-th/0001010](#).

13) SUPERCONFORMAL HYPERMULTIPLETS.

By Bernard de Wit, Bas Kleijn (Utrecht U.) and Stefan Vandoren (SUNY, Stony Brook), Nucl. Phys. B568 (2000) 475, [hep-th/9909228](#).

12) MULTI-INSTANTON CALCULUS AND THE ADS / CFT CORRESPONDENCE IN N=4 SUPERCONFORMAL FIELD THEORY.

By Nicholas Dorey (Washington U., Seattle and Swansea U.), Timothy J. Hollowood (Los Alamos and Swansea U.), Valentin V. Khoze (Durham U.), Michael P. Mattis (Los Alamos), Stefan Vandoren (Swansea U.), Nucl.Phys. B552 (1999) 88, [hep-th/9901128](#).

11) MULTI-INSTANTONS AND THE MALDACENA CONJECTURE.

By N. Dorey (Seattle and Swansea U.), T. Hollowood (Los Alamos and Swansea U.), V. Khoze (Durham U.), M. Mattis (Los Alamos) and S. Vandoren (Swansea U.), JHEP 9906:023, 1999, [hep-th/9810243](#).

10) YANG-MILLS INSTANTONS IN THE LARGE N LIMIT AND THE ADS / CFT CORRESPONDENCE.

By Nicholas Dorey (Swansea U. and Washington U., Seattle), Valentin V. Khoze (Durham U.), Michael P. Mattis (Los Alamos), Stefan Vandoren (Swansea U.), Phys. Lett. B442 (1998) 145, [hep-th/9808157](#).

9) INSTANTON EFFECTS IN THREE-DIMENSIONAL SUPERSYMMETRIC GAUGE THEORIES WITH MATTER.

By N. Dorey, D. Tong (Washington U., Seattle and Swansea U.), S. Vandoren (Swansea U.), J.High Energy Phys. **04** (1998) 005, [hep-th/9803065](#).

8) SPECIAL GEOMETRY IN HYPERMULTIPLETS.

By J. De Jaegher (Leuven U.), B. de Wit, B. Kleijn (Utrecht U.), S. Vandoren (Swansea U.), Nucl. Phys. **B514** (1998) 553, [hep-th/9707262](#).

7) INSTANTONS, THREE-DIMENSIONAL GAUGE THEORY, AND THE ATIYAH-HITCHIN MANIFOLD.

By N. Dorey (Swansea U.), V.V. Khoze (Durham U.), M.P. Mattis (Los Alamos), D. Tong, S. Vandoren (Swansea U.), Nucl. Phys. **B502** (1997) 59, [hep-th/9703228](#).

6) AN ALTERNATIVE BRST OPERATOR FOR TOPOLOGICAL LANDAU-GINZBURG MODELS.

By F. De Jonghe (NIKHEF, Amsterdam), P. Termonia, W. Troost, S. Vandoren (Leuven U.), Phys. Lett. **B358** (1995) 246, [hep-th/9505174](#).

5) CONSTRUCTION OF TOPOLOGICAL FIELD THEORIES USING BV.

By F. De Jonghe, S. Vandoren (Leuven U.), Phys. Lett. **B324** (1994) 328, [hep-th/9310166](#).

4) SIMPLIFICATIONS IN LAGRANGIAN BV QUANTIZATION EXEMPLIFIED BY THE ANOMALIES OF CHIRAL W(3) GRAVITY.

By S. Vandoren, A. Van Proeyen (Leuven U.), Nucl. Phys. **B411** (1994) 257, [hep-th/9306147](#).

3) THE BATALIN-VILKOVISKY FORMALISM ON FERMIONIC KÄHLER MANIFOLDS.

By S. Aoyama, S. Vandoren (Leuven U.), Mod. Phys. Lett. **A8** (1993) 3773, [hep-th/9305087](#).

2) THE REGULARIZED BRST JACOBIAN OF PURE YANG-MILLS THEORY.

By F. De Jonghe, R. Siebelink, W. Troost, S. Vandoren (Leuven U.), P. van Nieuwenhuizen, A. Van Proeyen (CERN), Phys. Lett. **B289** (1992) 354, [hep-th/9206097](#).

1) UNITARY REPRESENTATIONS OF TWISTED N=4 SUPERCONFORMAL ALGEBRAS.

By S. Vandoren (Leuven U.), Mod. Phys. Lett. **A6** (1991) 1983.

- **Conference Proceedings**

ORIENTIFOLDING IN N=2 SUPERSPACE.

Daniel Robles-Llana (Utrecht U.), Martin Rocek (YITP, Stony Brook), Frank

Saueressig (Utrecht U.), Ulrich Theis (Jena U., TPI), Stefan Vandoren (Utrecht U.), Fortsch. Phys. 55:615, 2007, [hep-th/0701282](#).

QUATERNION-KAHLER SPACES, HYPERKAHLER CONES, AND THE C-MAP.

By Martin Rocek (SUNY, Stony Brook), Cumrun Vafa (Harvard U.), Stefan Vandoren (Utrecht U.), In “Handbook of pseudo-Riemannian geometry and supersymmetry”, IRMA Lectures in Mathematical Physics, [math-dg/0603048](#).

THE IDENTIFICATION OF CONFORMAL HYPERCOMPLEX AND QUATERNIONIC MANIFOLDS.

By Eric Bergshoeff, Stefan Vandoren, Antoine Van Proeyen, Int. J. Geom. Meth. Mod. Phys., 3 (2006) 913, Contribution to the proceedings volume for the Conference “Symmetry in Geometry and Physics” in honour of Dmitri Alekseevsky, September 2005, [math.dg/0512084](#).

BRANE SOLUTIONS OF GRAVITY-DILATON-AXION SYSTEMS.

By E. Bergshoeff, A. Collinucci (Groningen U.), U. Gran, D. Roest (King’s Coll. London), S. Vandoren (Utrecht U.),. 2005. 20pp. Prepared for 19th Max Born Symposium: Fundamental Interactions and Twistor-like Methods, Wroclaw, Poland, 28 Sep - 1 Oct 2004. Published in AIP Conf.Proc.767:223-242,2005 Also in *Wroclaw 2004, Fundamental interactions and twistor-like methods* 223-242.

NON-EXTREMAL INSTANTONS AND WORMHOLES IN STRING THEORY.

By E. Bergshoeff, A. Collinucci (Groningen U.), U. Gran, D. Roest (King’s Coll. London), S. Vandoren (Utrecht U.), proceedings of RTN Workshop on the Quantum Structure of Space-time and the Geometric Nature of Fundamental Interactions and EXT Workshop on Fundamental Interactions and the Structure of Spacetime, Kolymbari, Crete, Greece, 5-10 Sep 2004. Published in Fortsch. Phys. 53:990-996, 2005, [hep-th/0412183](#).

INSTANTON SOLUTIONS FOR THE UNIVERSAL HYPERMULTIPLYLET.

By Marijn Davidse, Mathijs de Vroome (Utrecht U.), Ulrich Theis (Vienna, Tech. U.), Stefan Vandoren (Utrecht U.), Fortsch. Phys. 52 (2004) 696, [hep-th/0309220](#).

INSTANTONS AND QUATERNIONS.

By S. Vandoren (SUNY, Stony Brook), in the proceedings of the TMR conference *Nonperturbative Quantum Effects*, September 2000, Paris, [hep-th/0009150](#).

RIGID N=2 SUPERCONFORMAL HYPERMULTIPLYLETS.

By Bernard de Wit, Bas Kleijn (Utrecht U.), Stefan Vandoren (Swansea U.), in

the proceedings of *Dubna 1997, Supersymmetries and quantum symmetries* 37-45, hep-th/9808160.

SPECIAL GEOMETRY AND COMPACTIFICATION ON A CIRCLE.

By B. de Wit, B. Kleijn (Utrecht U.), S. Vandoren (Swansea U.), in the proceedings of *Quantum Aspects of Gauge Theories, Supersymmetry and Unification*, Neuchatel, Switzerland, 18-23 Sep 1997, hep-th/9801039.

THE TOPOLOGICAL TWIST AND BRST ANTI-BRST GAUGE FIXING IN N=2 LANDAU-GINZBURG MODELS.

By F. De Jonghe, P. Termonia, W. Troost and S. Vandoren (Leuven U.), in the proceedings of *Strings '95*, eds. I. Bars et al., World Scient., 1996, p 283.

GAUGING CONFORMAL ALGEBRAS WITH RELATIONS BETWEEN THE GENERATORS.

By K. Thielemans (Imperial Coll., London), S. Vandoren (Leuven U.), in the proceedings of *Gauge Theories, Applied Supersymmetry, and Quantum Gravity*, Leuven, Belgium, 10-14 Jul 1995, p 309, and in *Quantum Gravity*, Moscow, Russia, Jun 12-17, 1995, hep-th/9511200.

REDEFINING B TWISTED TOPOLOGICAL SIGMA MODELS.

By F. De Jonghe (NIKHEF, Amsterdam), P. Termonia, W. Troost, S. Vandoren (Leuven U.), in the proceedings of *Gauge Theories, Applied Supersymmetry, and Quantum Gravity*, Leuven, Belgium, 10-14 Jul 1995, p 129, hep-th/9510176.

- **Book**

TIJD IN MACHTEN VAN TIEN, Natuurverschijnselen en hun tijdschalen, G. 't Hooft en S. Vandoren, Veen Magazines, ISBN 9789085712435, Augustus 2011, 219p.

TIME IN POWERS OF TEN, Natural Phenomena and Their Timescales, G. 't Hooft and S. Vandoren, World Scientific, ISBN 978-981-4489-80-5, 2014, 212p.

- **Other**

LECTURES ON INSTANTONS.

Stefan Vandoren (Utrecht U.), Peter van Nieuwenhuizen (SUNY, Stony Brook), arXiv:0802.1862 [hep-th].

COVARIANT QUANTIZATION IN THE ANTIFIELD FORMALISM.

By Stefan Vandoren (Leuven U.), PhD Thesis, hep-th/9601013.