CURRICULUM VITAE

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Prof. Dr. Sergey D.Odintsov

1. Personal data

Date of birth: March 2, 1959.

Place of birth: Schychinsk, Kazakhstan, USSR.

Sex: male.

Family status: married, son and daughter.

Citizenship: spanish

2. Academic degrees, awards and distinctions

- 1. Master Thesis in Physics, "Particles Creation in the external electrical and gravitational fields", Tomsk University, 1981. Advisor: Prof. V.G.Bagrov. With the highest qualification: "excellent".
- 2. PhD in Physics, "Renormalization group approach to effective action in curved spacetime", Tomsk University, 1985. Advisors: Prof. V.G.Bagrov, Prof.I.L.Buchbinder. With the highest qualification: "summa cum laude".
- 3. Extraordinary Scientific Award of Tomsk Region for Young Scientists, 1987.
- 4. Highest scientific degree in physics and mathematics in Russia-Doctor of Science, December 1991, Dissertation entitled "The effective action in the models of quantum gravity",
- 5. Full Professor of Physics and Mathematics, 1992. Approved by the Russian Ministry of Higher Education, March 1995. (Academical title-Professor). Since November 1995 Tomsk Pedagogical Institute has been renamed to Tomsk State Pedagogical University.
- 6. Honorary Diploma of Russian Science Ministry of Year 2000 for Scientific Results in QFT.

- 7. Honorary Degree of SOROS PROFESSOR of Year 2000 awarded by International SOROS Foundation.
- 8. In 1996-2005 permanent member of Doctorate Council at Tomsk State Pedagogical University
- 9. 2001-2003 TSPU Rector Adviser on Science and International Relations
- 10. Director of the Laboratory for Fundamental Study at TSPU 2002-2005
- 11. In October of 2003 is elected as Foreign Member of Royal Norwegian Academy of Sciencesand Letters (permanently)
- 12. Annual Scientific Award of the Governor of Tomsk Province (Russia) of 2003
- 13. Awarded by Anniversary Medal 400 years of Tomsk in 2004 and by TSPU Medal for Achievments in Edication in 2003.
- 14. Awarded by the First Scientific Prize of the Scientific Council of Tomsk State PedagogicalUniversity in 2005 for Great Achievments in Research.
- 15. Awarded by 2007 (group) Scientific Prize of Tomsk Province (Russia) for extraordinary achievments.
- 16. 2011 Tomsk Province Governor Award: Professor Fellowship in Natural Sciences of 2011
- 17. Honorary Diploma of Tomsk city Major on occasion of Day of Science 2011
- 18. Honoured Professor of Higher School of Russian Federation, August 2011
- 19. Mentioned by November issue of russian edition of journal FORBES (2011) among top ten world-known scientists of russian origin
- 20. European Physics Letters Distinguished referee of 2011,2018,2019,2020
- 21. Member of European Physical Society from 2012
- 22. 2012, 2013 and 2014 PLB Referee Excellence certificates
- 23. Awarded by 2013 (group) Scientific Prize of Tomsk region
- 24. The only spanish-catalan physicist awarded by Amaldi Gold Medal 2014: European Prize forGravitational Physics
- 25. The Worlds Most influential scientific minds : Top Cited Thomson-Reuters/Clarivate Analytics Researcher/2014-2018, 5 years in a row
- 26. Member of Italian Gravitational Society (SIGRAV) from 2014

- 27. Outstanding referee of APS (from PRD and PRL) for 2014
- 28. Outstanding reviewer from CQG and Phys. Scripta 2019
- 29. Silver Medal (2017) and Honorary Professorship (2019) from TSPU, Tomsk
- 30. Silver Sign (2019), Medal (2019) and Honorary Professorship (2020) from TUSUR, Tomsk
- 31. Web of Science Award 2017.
- 32. Medal For achievements of Tomsk regional gov-t, 2019.

3. List of scientific publications

More than 650 scientific publications in research journals:

https://inspirehep.net/literature?sort=mostrecent&size=25&page=1&q=f%20a%20s%20odintsov

3.1. International citations, opinions and comments

1. Two ms were cited more than 2500 times, 5 papers and two monographs were cited more than 1000 times. Totally more than 50000 citations. Hirsh-index is 100(Inspires), 91(Scopus) and 110(Google Scholar).

3.2. Refereing and reviewing for scientific journals

Referee for

- 1. Physics Letters B, JCAP, JHEP, NPB and J. Math. Phys.
- 2. AHEP, Can.J.Phys., EPJC, Class.Quant.Grav. and Journal of Physics A
- 3. Phys.Rev.D and Phys.Rev.Lett.
- 4. Astrophysics and Space Sci., EPL, New J. of Physics
- 5. Mod.Phys.Lett.A, Int.J.Mod.Phys.A and D, Gravitation and Cosmology, J of Gravity, Ind.J.Phys.,J.Mod.Phys., Repts.Math.Phys.,JJGMMP.
- 6. GRG, Theor. Math. Phys., CEJP, and Int J. Theor. Phys.,
- 7. Izv. VUZov, Fizika (Sov. Phys. J.),now translated as Russian Physics Journal, Scholarly Exchange Research and Adv. Theor.Physics,JETP,PETP
- 8. Associate Editor of European Physical Journal C (2010-2012)
- 9. Member of Editorial Board of The Open Astronomy Journal (2009-2011)

- 10. Member of Editorial Board of J.Mod.Phys. (2009-2010)
- 11. Member of Editorial Board of Gravitation and Cosmology(2008-current)
- 12. Member of Editorial Board of TSPU Bulletin (2004-current)
- 13. Member of Advisory Panel of Classical and Quantum Gravity (2011-2020)
- 14. Member of Editorial Board of Journal of Gravity (2013-2017)
- 15. Member of Editorial Board of Int. Journal of Geometric Methods in Modern Physics (IJGMMP) (2013-current)
- 16. Member of Editorial Board of Universe (MDPI) (2014-current)
- 17. Editor-in-Chief of Symmetry (MDPI) (2014-current)
- 18. Member of Editorial Board of IJMPD (2018-current)
- 19. Member of Editorial Board of Galaxies (MDPI) (2019-current)

4. Research activity: projects, contracts and grants

4.1. Research fields

Main description: Modern Cosmology and High Energy Physics: Classical and Quantum Cosmology, Dark Energy and Astrophysics, Modified Gravities, Inflation, Quantum Gravity/Superstrings, Quantum Field Theory and renormalization group

Subjects and specialities: Dark energy and future singularities, Modified gravity including string-inspired gravity, the universe evolution, Inflation, Late-time universe, black holes,

Brane-world cosmology and brane-world astrophysics,

Effective action formalism,

AdS/CFT and dS/CFT correspondence,

Perturbative (higher derivative) quantum gravity, Quantum Kaluza-Klein theories,

Quantum interacting fields in curved spacetime,

Casimir effect and Zeta-regularization technique in non-trivial backgrounds.

4.2. Grants and Fellowships

- 1. Grant from Royal Society, London: Physics Department, Newcastle University, Newcastleupon-Tyne, England (1989) (three months).
- 2. Awarded by few visiting professorships from JSPS , Japan 1992-1993,1996, 2007, 2009, 2012, 2014, 2016, 2018, 2019.

- 3. Visiting Professor Grant from MEC, Spain: Department E.C.M., Barcelona University, Barcelona, Spain 1992 (6 months).
- 4. Visiting Professor (Catedratico) from Generalitat de Catalonia, Catalonia, Spain and MEC,Spain: Department E.C.M.,Barcelona University, Spain 1994-1995(two years).
- 5. Full Professor Grant from COLCIENCIES (Colombia) and from Univalle to work at Universidaddel Valle, Cali, Colombia. 1996-1998
- Researcher of projects FIS2005-01181 (MEC, Spain)(2006-2008), CPAN Consolider IngenioProject (2008-2013), 2005SGR00790 (AGAUR,Catalunya, Spain)(2006-2008) and 2009SGR994 (2011-2014) and ESF Research Networking Program grant Casimir effect:2008-2013. Investigator of the project FIS2006-02842 (MEC,Spain) (2007-2011); FIS2010- 15640 (20102015). Principal Investigator of PIE2007 project (MICINN, Spain),2007-2009 and PI of the project FIS2013-44881(MINECO, Spain) (2013-2017). Coordinator of CSIC I-LINK1019 project(2016-2017).
- 7. PI of MINECO project (2017-2019) 99.000 euros and PID2019-104397GB-I00(2021-2024) 32.000 euros
- 8. Principal Investigator of projects at Tomsk State Pedagogical university (2011-2016) and TUSUR Univ. grant for Int Lab.Theor.Cosm (2015-2021).
- 9. Visiting professor of Eurasian Nat. University, Astana, Kazakhstan July 2012-June 2013.
- 10. Researcher of COST project Pharos (2017-2021), AGAUR SGR247 project of Catalan administration, COST project Cantata (2016-2020), projects at TSPU (Tomsk), ENU (Kasakhstan) and KFU (Kazan).

4.3. Some international invitations

- 1. During 2000-2020 more than 100 seminars are given in Spain, Norway, Italy, Russia, Brasil, Colombia, Mexico, Korea, Japan, China, Serbia, Croatia, Denmark, etc.
- 2. Invited by S.Hawking to DAMTP, Cambridge, UK in November 2001. Seminar Brane-worldsin HD gravity is delivered.
- 3. Invited as short time visitor by S.W.Hawking to DAMTP, Cambridge,UK from 5.07 to 12.07 of 1998. Seminar (Dilaton coupled matter conformal anomaly and anti-evaporating black holes) is given in Relativity Group.

4.4. Participation in International Conferences, Seminars and Schools

1. Speaker/lecturer of about 120 international conferences and chair/organizer of about 40 int.conferences.

5. Teaching activity

5.1. Teaching positions

- 1. Associated Professor (Lecturer), Faculty of Mathematics and Physics, Tomsk PedagogicalInstitute, Tomsk, Russia, 1985-1987.
- 2. Professor (Docent), Faculty of Mathematics and Physics, Tomsk Pedagogical Institute, Tomsk, Russia, 1987-1990 and 1991-1993.
- 3. Investigator in Theoretical Physics, Faculty of Mathematics and Physics, Tomsk PedagogicalInstitute, Tomsk, Russia, 1990-1991.
- 4. Full Professor, Faculty of Mathematics and Physics, Tomsk Pedagogical University, Tomsk, Russia, 1993-2005. Scientific Adviser of TSPU Rector.
- 5. ICREA Research Professor at Space Research Institute (ICE)- (CSIC-IEEC), Barcelona, Spain from 2003 (July).

5.2. Teaching subjects

Classical and Quantum Cosmology.

Mathematical Analysis.

Variational Analysis and Differential Equations.

Theory of Classical Fields. Electrodynamics.

Quantum Field Theory and Theory of Elementary Particles.

General Relativity.

Quantum Gravity-perturbative approach.

5.3. Books authored

- 1. I.L.Buchbinder, S.D.Odintsov and I.L.Shapiro, Effective action in quantum gravity, IOP Publishing, Bristol and Philadelphia, 411 pages, 1992.
- 2. E. Elizalde, S.D. Odintsov, A. Romeo, A.A. Bytsenko and S. Zerbini, Zeta regularization techniques with applications, World Scientific, Singapore, 319 pages, 1994.

- 3. S.D. Odintsov, Editor of Gravitation and Cosmology **8**, **n1-2** (2002), Special issue dedicated to 100th anniversary of TSPU.
- 4. M.C.B. Abdalla, A.A. Bytsenko, M.E.X. Guimaraes and S.D. Odintsov, Editors of Proceedings of the Second International Winter School on Mathematical Methods in Physics, Londrina, Brazil, 2002, Int.J.Mod.Phys. **A18** n12 (2003).
- 5. S.D. Odintsov, Editor of Vestnik of Tomsk State Pedagogical University, special issue (Quantum Gravity and Cosmology) v.7(44) (2004) p.1-120.
- 6. E. Elizalde and S.D. Odintsov, Guest Editors of J.Phys.A.v.39 (2006) p.6109-6822.
- 7. S.D. Odintsov, E. Elizalde and O.G. Gorbunova, Scientific Editors of special volume TheCasimir Effect and Cosmology, in the occasion of 70th birthday by Prof.I. Brevik, TSPU Publishing, 2008 (192 pages).
- 8. S.D. Odintsov and V V Obukhov, editors of volume in honour by E.Elizalde, Cosmology, the Quantum Vacuum and Zeta Functions: a choice of papers, TSPU Publishing, Tomsk 2009, 405 pages.
- 9. S.D. Odintsov, D. Saez-Gomez and S. Xambo (Editors) Cosmology, the Quantum Vacuumand Zeta-Functions, Proceedings of Physics, Springer, 2011.

5.4. PhD and Master Thesis

- 1. Director of the PhD Thesis of Dr.Yu.I.Shilnov, entitled *Effective Potential and SchwingerDyson equations in quantum field theory in curved space-time*, Tomsk University. Defensed April 1991.
- 2. Director of the PhD Thesis of Ms.I.N.Shevchenko,entitled *Gauge-fixing independent* effective action in quantum gravity, Tomsk University. Tomsk Pedagogical University. Defensed October 1997.
- 3. Advisor of the PHD thesis of Dr.E.N.Kirillova, entitled *Effective action in even-dimensional gravity and Gross-Neveu model*, Tomsk University.Defensed May 1988.
- 4. Advisor of the PHD of Dr. F.Sh. Zaripov, entitled *Scalar field with conformal coupling and self-interaction in cosmology. The coupling constants evolution.* Work done at Kazan University. Defensed at Tomsk University on 27 February 1991.

5. Advisor of the PHD thesis of Dr. O.A. Fonarev, entitled *The evolution of quantum field and quantum statistics systems in strong gravitational and gauge fields.*. Work done at Kazan University. Defensed at Tomsk University on 27 February 1991.

6. Director of PHD thesis of J. Hurtado Quiroga entitled *The cosmological models with constant curvature in dilatonic gravity with account of quantum effects*, TSPU, Tomsk, Russia Defensed 27.12.2003.

7. Director of PHD thesis of A.V. Timoshkin entitled *Quantum effects in theoretical field models: Chern-Simons and Brans-Dicke theories*, TSPU, Tomsk, Russua. Defensed 30.11.2004.

8. Director of PHD thesis of Yu.A. Shaido entitled *The Friedman cosmological models in dilaton and modified gravity with account of quantum effects*, TSPU, Tomsk, Russia. Defensed 26.02.2006.

9. Director of PHD thesis of O.G. Gorbunova entitled *The dark energy problem in Friedmann Universe with viscous ideal fluid and in modified gravity*, TSPU, Tomsk, Russia. Defensed 30.10.2007.

10. Co-Director of PHD thesis of D.Saez-Gomez entitled *On FLRW cosmologies in non-standard gravity*, UB, Barcelona, Spain. Defensed 31.03.2011.

11. Co-Director of PHD thesis of A.J. Lopez-Revelles entitled *Theories of modified gravity and reconstruction schemes of cosmological models*, UB, Barcelona, Spain. Defensed 08.11.2013.

12. Foreign Adviser of PHD thesis by N. Myrzakulov, ENU, Astana, Kazakhstan. Defended 28 Dec.2016.

13. Adviser of DS thesis which is superior of PHD by A.Timoshkin (Tomsk,2018).

14. 8 master students defense.

6. Knowledge of foreign languages

Fluent: English and Spanish. Understand: Italian, Catalan.