

# *CURRICULUM VITAE*

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## 1 Personal data

Date of birth: March 2, 1959.  
Place of birth: Schyichinsk, Kazakhstan, USSR.  
Sex: male.  
Family status: married, son and daughter.  
Citizenship: spanish citizen

## 2 Academic degrees, awards and distinctions

1. *PhD in Physics, "Renormalization group approach to effective action in curved space-time"*, Tomsk University, 1985. Advisors: Prof. V.G.Bagrov, Prof.I.L.Buchbinder. With the highest qualification: "summa cum laude".
2. *Doctor of Science: Highest scientific degree in physics and mathematics in Russia, December 1991*, Inst.Theor.Physics, Kiev, USSR. Title: *Dissertation entitled "The effective action in the models of quantum gravity"*,
3. *Full Professor of Physics and Mathematics*, 1992. Approved by the Russian Ministry of Higher Education and Science, March 1995. (Academical title-Professor). Since November 1995 Tomsk Pedagogical Institute has been renamed to Tomsk State Pedagogical University (TSPU).
4. 2001-2003 TSPU Rector Adviser on Science and International Relations
5. Academician of Royal Norwegian Academy (Trondheim) since 2010.
6. Annual Scientific Award of the Governor of Tomsk Province (Russia) in 2003
7. Awarded by 2007 (group) Scientific Prize of Tomsk Province (Russia) for extraordinary achievements.
8. 2011 Tomsk Province Governor Award: Professor Fellowship in Natural Sciences of 2011
9. Honoured Professor of Higher School Universities of Russian Federation, August 2011 (given by the order of Russian President D. Medvedev)
10. Mentioned by November issue of russian edition of journal FORBES (2011) among top ten world-known scientists of russian origin including 3 Nobel prize winners

11. European Physics Letters Distinguished referee of 2011,2018,2019 and 2020.
12. Member of European Physical Society from 2012
13. 2012, 2013 and 2014 PLB Referee Excellence certificates
14. Awarded by 2013 (group) Scientific Prize of Tomsk region
15. The Amaldi Gold Medal 2014: European Prize for Gravitational Physics
16. Most influential scientific minds: Highly-cited Thomson-Reuters/Clarivate Analytics researcher 2014,2015,2016,2017,2018 and 2023.
17. Member of Italian Gravitational Society (SIGRAV) from 2014
18. Outstanding referee of APS (from PRD and PRL) for 2014 and EPJC for 2018, CQG and Physica Scripta -2019
19. Silver Medal (2017) and Honorary Professorship (2019) from TSPU, Tomsk and Silver sign (2019), Medal (2019) and honorary professorship (2020) from TUSUR, Tomsk
20. Web of Science Award 2017 and Medal for Achievements from Tomsk Regional Government(2019)
21. Member of Serbian Academy of Nonlinear Sciences (SANS) from 2023
22. Scientific director of International Laboratory of Theoretical Cosmology, TUSUR University, Tomsk, Russia (2015-current)
23. According to research.com ranked 532 among the Top 1000 scientists in Physics in the world (2023).

### 3 List of scientific publications

More than 740 scientific publications in research journals

<https://inspirehep.net/literature?sort=mostrecent&size=25&page=1&q=f%20a%20s%20odintsov%20&ui-citation-summary=true>

#### 3.1 International citations, opinions and comments

1. Two papers were cited more than 3000 times each, four papers-more than 2000 times each and 6 papers and two monographs were cited more than 1000 times.
2. Totally about 70000 citations. Hirsh-index is 114 (Inspires), 107 (Scopus) and 125 (Google Scholar).

## 3.2 Editor for scientific journals

### Editor for

1. Associate Editor of European Physical Journal C (2010-2012)
2. Member of Editorial Board of The Open Astronomy Journal (2009-2011)
3. Member of Editorial Board of J.Mod.Phys. (2009-2010)
4. Member of Editorial Board of Gravitation and Cosmology(2008-current)
5. Member of Editorial Board of TSPU Bulletin (2004-current)
6. Member of Advisory Panel of Classical and Quantum Gravity (2011-2020)
7. Member of Editorial Board of Journal of Gravity (2013-2017)
8. Member of Editorial Board of Int.Journal of Geometric Methods in Modern Physics (IJG-MMP) (2013-current)
9. Member of Advisory Board of Universe (MDPI) (2014-current)
10. Editor-in-Chief of Symmetry (MDPI) (2014-current)
11. Member of Editorial Board of Galaxies(MDPI) (2017-current)
12. Member of Editorial Board of Int.J.Mod.Phys.D (2017-current)
13. Member of Editorial Board of Astrophysics (2022-current)
14. Member of Editorial Board of TUSUR Doklady (2017-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, Inflation, Late-time universe- $\Lambda$ CDM, black holes, Brane-world cosmology and brane-world astrophysics, 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, Newcastle-upon-Tyne, England (1989) (three months).
2. Awarded by several Fellowships of the Japan Society for Promotion of Science (Japan) from few weeks till one year for YITP, Kyoto, Nagoya University and Hiroshima Univ.: 1992-1993,1996,2007,2009,2012,2014,2016,2018,2019,2022.
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 COLCIENCIAS (Colombia) and from Univalle to work at Universidad del Valle,Cali,Colombia.1996-1998
6. Researcher of projects FIS2005-01181 (MEC, Spain)(2006-2008), CPAN Consolider Ingenio Project (2008-2013), 2005SGR00790 (AGAUR,Catalunya, Spain)(2006-2008) and 2009SGR-994 (2011-2014) and ESF Research Networking Program grant Casimir effect:2008-2013. Investigator of the project FIS2006-02842 (MEC,Spain) (2007-2011); FIS2010-15640 (2010-2015). 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) and PI of MINECO project 2020-2024.
8. NATO Science Fellowship (one month) at Norwegian University of Science and Technology, Trondheim, Norway, February 1999.
9. Visiting Professor at Inst. de Fisica de la UG, Leon (supported by CONACyT, Mexico) 2000-2001 (two years).
10. Principal Investigator of projects at Tomsk State Pedagogical university (2011-2016) and PI of TUSUR Univ. grant for Int Lab.Theor.Cosm (2015-2022).
11. Visiting professor of Eurasian Nat.University, Astana, Kazakhstan July 2012-June 2013 (one year).

## 4.3 Some international invitations

1. During 2000-2020 more than 150 seminars are given in Spain, Norway,Italy, Russia, Brasil,Colombia, Mexico,China,Korea,Japan,Serbia,Croatia, Denmark,Finland,UK,USA etc

2. Visiting professor of Nagoya Univ., KMI one month (2016), two month in 2014. Visiting Professor at YITP (July 2007-October 2007);
3. Invited by S.Hawking to DAMTP, Cambridge, UK in November 2001. Seminar Brane-worlds in HD gravity is delivered.
4. Invited as short time visitor by S.W.Hawking to DAMTP, Cambridge,UK July, 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 140 international conferences and chair/organiser of about 40 international conferences

### **5 Teaching activity**

#### **5.1 Teaching positions**

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

#### **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 The Casimir 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 Vacuum and 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 Schwinger-Dyson 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. Co-director 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. Co-director 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. Co-director 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, Russia. 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. Defensed 28 Dec.2016.
13. Director of 8 Master students thesis at UAB, Barcelona
14. Scientific Adviser of Doctor of Science dissertation which is superior of PHD by A.V.Timoshkin (2018).

## 6 Knowledge of foreign languages

Fluent: English and Spanish.

Understand : Italian, Catalan.