

CV V.K. Oikonomou

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October 27, 2020

EDUCATION

- PhD in Theoretical Particle and Mathematical Physics, Aristotle University of Thessaloniki, Physics Department, Quantum Field Theories at Finite Temperature and Volume
- Diploma in Physics, Aristotle University of Thessaloniki, Physics Department
- Master Degree in Chemical Education, Chemistry Department, Aristotle University of Thessaloniki

PROFESSIONAL EXPERIENCE

- Staff, Physics Department Aristotle University of Thessaloniki
- Post-Doc Researcher at Max-Planck Institute for Mathematics in the Sciences, Leipzig Germany, Juergen Jost Group
- Scientific Associate, Technological Institute Serres
- European Union Funding : Supersymmetric Scenarios for Colliders and the Universe

Lectures at Aristotle University of Thessaloniki

- Mathematical Analysis I (Postgraduate Compulsory Course, Physics Department)
- Mathematical Analysis II (Postgraduate Compulsory Course, Physics Department)
- Theoretical Mechanics (Postgraduate Compulsory Course, Mathematics Department)
- Advanced Theoretical Mechanics (Master Course, Physics Department)
- Mathematical Methods for Physicists (Master Course, Physics Department)
- Relativistic Quantum Mechanics (Master Course, Physics Department)

INTERNATIONAL COLLABORATIONS

- Tomsk State Pedagogical University and TUSUR, Tomsk, Russia
- ICE-ICREA, Barcelona, Spain
- Max-Planck Institute for Mathematics in the Sciences, Leipzig, Germany
- Tuebingen University, Germany
- International Hellenic University

Funded Scientific Visits (1-3 Months)

- Max-Planck Institute for Mathematics in the Sciences, Leipzig, Germany, 2014
- Max-Planck Institute for Mathematics in the Sciences, Leipzig, Germany, 2018
- Tuebingen University, ITAAT, Germany 2019
- Laboratory for Theoretical Cosmology, Tomsk State University of Control Systems and Radioelectronics, 634050 Tomsk, Russia (TUSUR), Tomsk State Pedagogical University, 2015
- Laboratory for Theoretical Cosmology, Tomsk State University of Control Systems and Radioelectronics, 634050 Tomsk, Russia (TUSUR), Tomsk State Pedagogical University, 2016
- Laboratory for Theoretical Cosmology, Tomsk State University of Control Systems and Radioelectronics, 634050 Tomsk, Russia (TUSUR), Tomsk State Pedagogical University, 2017
- Laboratory for Theoretical Cosmology, Tomsk State University of Control Systems and Radioelectronics, 634050 Tomsk, Russia (TUSUR), Tomsk State Pedagogical University, 2018

GREEK RESEARCH PROJECTS-GRANTS

12 Research Grants, 11 completed, 1 ongoing from International Hellenic University

SCIENTIFIC INTERESTS

Cosmology, Inflationary Cosmology, Modified Theories of Gravity, Physics of the Early Universe, Dark Energy, Dark Matter, Supersymmetry, Mathematical Physics, High Energy Physics, Theoretical Physics, Epistemic Game Theory, Game Theory

PUBLICATIONS

175 articles (in 171 corresponding author), 62 single author, 165 Publications-accepted articles (in 161 corresponding author), in international journals with referees in the field of cosmology, theoretical physics and mathematical physics, game theory, physical chemistry. 5 Publications in conference proceedings with referees. 3 Publications on Mathematical Economics and Game Theory. 1 Publication in Chemistry-Chemical Physics. 2 Publications-contributions in International Collective Volumes in Physics and Mathematical Physics.

h-index: 31 (Inspires 2020)

COMMISSIONS OF TRUST

Editorial Board of International Refereed Journals

- Member of the Editorial Board of the International Journal of Geometric Methods of Modern Physics
- Member of the Editorial Board of the international journal “Symmetry” MDPI
- Member of the Editorial Board of the Journal of Modern Physics
- Advisory Board of “SCI” MDPI
- Reviewer Board of the journal “Universe” MDPI
- *Guest Editor* of Symmetry for 2015-2016 for the special issue Revealing the Symmetries of the Universe: Dark Energy, Inflation and Modified Gravity
- *Guest Editor* of the journal Universe for the special issue F(R) Gravity Cosmology 2018
- *Guest Editor* of Symmetry for the special issue “Inflationary Universe” 2018
- *Guest Editor* of Symmetry for the special issue “Mathematical Cosmology” 2018

Evaluator for International Research Programs

- External Evaluator of Scientific Projects-Proposals for INFN, Italy
- External Evaluator of Scientific Projects-Proposals for the Royal Czech Science Foundation-GRS, Czech Republic
- External Evaluator of Scientific Projects-Proposals for the Italian Ministry of Education
- External Evaluator of Scientific Projects-Proposals for the National Science Center, Poland
- External Evaluator of Chilean National Science and Technology Commission (CONICYT - Chile)
- Book and Proposal Evaluator for Elsevier
- PhD Evaluator for Napoli University
- PhD Evaluator for British University of Egypt

SUPERVISION OF GRADUATE STUDENTS

- Diploma Thesis of Student in Technological Educational Institute of Central Macedonia, Serres, Greece with title: Quantum information theory and Quantum computers-2010
- Master Thesis of Student in Aristotle University of Thessaloniki, Department of Physics, Greece Title: Modified Gravity Cosmology, resulting in four publications: arXiv:1907.00403, arXiv:1905.01904, arXiv:1908.08141, arXiv:1908.09218, 2009.12897 (MSc Student N. Chatzarakis 2019)
- Diploma thesis collaboration in Aristotle University of Thessaloniki, Department of Physics, Greece with graduate student, on modified gravity inflationary and late-time phenomenology, (Student F. Fronimos 2020), arXiv:2006.05512, arXiv:2004.08884, arXiv:2003.13724, 2009.12897, 2009.06113

- Master Thesis of Student in Aristotle University of Thessaloniki, Department of Physics, Greece, Title: Einstein-Gauss-Bonnet Inflation: (Student: Stavros Venikoudis 2021), arXiv: 2009.06113
- Diploma thesis in Aristotle University of Thessaloniki, Department of Physics, Greece with graduate student, Gauss-Bonnet Dark Energy Era Phenomenology (Student: Kostantinos Fasoulakos 2021), PRD Accepted

Papers with my Students

- V.K. Oikonomou and F. Fronimos, Reviving non-Minimal Horndeski-like Theories after GW170817: Kinetic Coupling Corrected Einstein-Gauss-Bonnet Inflation, [arXiv:2006.05512 [gr-qc]].
- S. Odintsov, V.K. Oikonomou and F.P. Fronimos, $f(R)$ Gravity k -Essence Late-time Phenomenology, Phys. Dark Univ. **29** (2020), 100563 [arXiv:2004.08884 [gr-qc]].
- S. Odintsov, V.K. Oikonomou and F.P. Fronimos, Rectifying Einstein-Gauss-Bonnet Inflation in View of GW170817, [arXiv:2003.13724 [gr-qc]]. Published in Nucl.Phys.B 958 (2020) 115135
- V. Oikonomou and N. Chatzarakis, Canonical scalar field inflation with a Woods-Saxon potential, Annals Phys. **411** (2019), [arXiv:1908.09218 [gr-qc]].
- N. Chatzarakis and V.K. Oikonomou, Autonomous Dynamical System of Einstein-Gauss-Bonnet Cosmologies, Annals Phys. **419** (2020), 168216 [arXiv:1908.08141 [gr-qc]].
- S.Nojiri, S. Odintsov, V.K. Oikonomou, N. Chatzarakis and T.Paul, Viable inflationary models in a ghost-free Gauss-Bonnet theory of gravity, Eur. Phys. J. C **79** (2019) no.7, 565 [arXiv:1907.00403 [gr-qc]].
- V.K. Oikonomou and N. Chatzarakis, The Phase Space of k -Essence $f(R)$ Gravity Theory, Nucl. Phys. B **956** (2020), 115023 [arXiv:1905.01904 [gr-qc]].
- S.D. Odintsov, V.K. Oikonomou, F.P. Fronimos Annals Phys. 420 (2020) 168250, e-Print: 2007.02309
- V.K. Oikonomou, F.P. Fronimos, Published in: EPL 131 (2020) 3, 30001, e-Print: 2007.11915 [gr-qc]
- S.D. Odintsov, V.K. Oikonomou, F.P. Fronimos, S.A. Venikoudis, Published in: Phys.Dark Univ. 30 (2020) 100718, e-Print: 2009.06113 [gr-qc]
- V.K. Oikonomou, F.P. Fronimos, N.Th. Chatzarakis, Physics of the Dark Universe Accepted, e-Print: 2009.12897

Reviewer in Journals

1. Physics Letters B
2. Scientific Reports, Nature Springer
3. Physics Letters A
4. Monthly Notices of the Royal Astronomical Society
5. Classical and Quantum Gravity

6. Annals of Physics
7. European Physical Journal C (EPJC)
8. Nuclear Physics B
9. The Astrophysical Journal
10. New Astronomy Elsevier
11. Journal of Physics A
12. International Journal of Modern Physics D
13. International Journal of Modern Physics A
14. General Relativity and Gravitation
15. Astrophysics and Space Science
16. Physics of the Dark Universe
17. Gravitation and Cosmology
18. European Physical Journal Plus
19. Foundations of Physics
20. International Journal of Geometric Methods of Modern Physics
21. Journal of Modern Physics
22. Advances in High Energy Physics
23. Advances in Astronomy
24. Information Sciences, Elsevier
25. Symmetry
26. Entropy
27. Canadian Journal of Physics
28. Royal Society Open Source
29. International journal of
30. Chinese Journal of Physics Mathematics and Statistics
31. Chinese Journal of Physics
32. Journal of Gravity
33. Universe Journal
34. Advanced Quantum Technologies
35. Universal Journal of Physics and Application
36. Theory in Biosciences

37. Asian Journal of Mathematics and Computer Research Physical Science International Journal
38. Computer Science
39. Journal of Basic and Applied Research international ? Journal of Applied Physical Science International
40. "Nuovo Cimento, Advances in Physics"
41. Universal Journal of Physics and Application
42. Proceedings of the National Academy of Sciences, Physical Sciences (NASA)
43. Physics Essays
44. Asian Journal of Mathematics and Computer Research
45. Hadronic Journal
46. Journal of Geography, Environment and Earth Science International
47. Mathematical Reviews

Organizing Committee of International Conferences and Meetings

- Local Organizing Committee of “Cosmology and Quantum Vacuum 2015, June 2015, Rhodes Greece
- International Advisory Board of “Siberian Cosmology Days 2015”, Tomsk, August 2015
- First TUSUR Cosmological Conference, Tomsk, Russia, August 2016
- Local Organizing Committee of “Mini-Workshop on Gravitation and Cosmology”, July 2017, Rhodes Greece
- Local Organizing Committee of “Siberian Cosmology Days 2018”, August 2018, Tomsk, Russian Federation
- Organizing Committee of “Siberian Spring Cosmology”, March 2019, Tomsk, Russian Federation

Conferences

- Cosmology and the Quantum Vacuum 2019, April 2019, Barcelona, Spain **invited talk**
- Siberian Cosmology Days 2018, Tomsk, August 2018, Russian Federation **invited talk**
- 2018 April, Brain storming on neutron stars in modified gravity, Barcelona, Spain **invited talk**
- “Mini-Workshop on Gravitation and Cosmology”, July 2017, Rhodes Greece **Organizer**
- August 2016 Quantum Field Theory and Gravity 2016, Tomsk Russia **invited talk**
- August 2016 First TUSUR Cosmological Conference, Tomsk, Russia, **invited talk**
- July 2015 Compact Stars and Black Holes, Tuebingen, Germany **invited talk**

- June 2015 Cosmology and the Quantum Vacuum, Rhodes, Greece (**Organizer**)
- September 2014 Cosmology and Quantum Vacuum, Benasque Spain **invited talk**
- June 2013 Prague, Quantum Symmetries and Integrability **invited talk**
- September 2012 ICMSQUARE, Budapest, **invited talk**
- Octomber 2012 Leipzig, Symposion on Money Value and Capital Transfers
- January 2012 Leipzig, Rationalizability and Economics
- September 2006 Renormalization Group Equations 2006, Leykada, Greece
- University of Athens September 2005 Third Aegean Summer School on Cosmology and the Early Universe, Chios, Greece
- National Technical University of Athens April 2005 Recent Developments In High Energy Physics, Thessaloniki, Aristotle University of Thessaloniki, Greece
- May 2004 Italo-Hellenic School of Physics 2004,The Physics of LHC, Lecce, Italy, University of Lecce
- September 2003 Second Aegean Summer School on Cosmology and the Early Universe, Syros, Greece
- National Technical Universty of Athens April 2003 Recent Developments In High Energy Physics, Athens, National Technical Universty of Athens
- April 2002 Recent Developments In High Energy Physics, Patras, University of Patras Septem-ber
- 2001 Corfu Summer Institute on Elementary Particle Physics, Corfu, National Technical University of Athens
- July 2001 "Non Linear Dynamics", Patras, University of Patras, Greece

COMPUTER SKILLS

Excellent knowledge of MsOffice in Windows, Word, Excel, Access, Internet Explorer, Outlook, PowerPoint, Degrees: Foundation Level Certificate, University of Cambridge, Advanced level Certificate Excellent knowledge of: Mathematica, Maple, Adobe Dreamweaver, Adobe Photoshop 7, Origin, Latex, HTML 4, Director MX

Publications in Economics in International Journals with Referees

1. Periodic Strategies a New Solution Concept-Algorithm for non-trivial Strategic Form Games, V.K. Oikonomou, Juergen Jost, Advances in Complex Systems, Vol. 20, No. 5 (2017) 1750009
2. Periodic Strategies II: Generalizations and Extensions, V.K. Oikonomou, Juergen Jost, Advances in Complex Systems: Vol. 23, No. 02, 2050005 (2020), arXiv:2005.12832
3. Periodic Strategies and Rationalizability in Perfect Information 2-Player Strategic Form Games, V.K. Oikonomou, Juergen Jost, Journal of Physics: Conference Series, Volume 410, Issue 1, 012070 (2013)

Publications in Chemistry

On Non-Linear Behavior of Viscosity in Low-Concentration Solutions and Aggregate Structures, V.K. Oikonomou, **Symmetry** 2018, 10(9), **368**

Publications in Theoretical Physics in International Journals with Referees

1. **Unification of a Bounce with a Viable Dark Energy Era in Gauss-Bonnet Gravity**, S.D Odintsov, V.K. Oikonomou, F.P. Fronimos, K.V. Fasoulakos, Physical Review D in press
2. **”Non-minimally coupled Einstein-Gauss-Bonnet inflation phenomenology in view of GW170817”**, S.D. Odintsov, V.K. Oikonomou, F.P. Fronimos Annals Phys. 420 (2020) 168250, e-Print: 2007.02309
3. **A Nearly Massless Graviton in Einstein-Gauss-Bonnet Inflation with Linear Coupling Implies Constant-roll for the Scalar Field**, V.K. Oikonomou, F.P. Fronimos, Published in: EPL 131 (2020) 3, 30001, e-Print: 2007.11915 [gr-qc]
4. **GW170817-compatible Constant-roll Einstein-Gauss-Bonnet Inflation and Non-Gaussianities**, S.D. Odintsov, V.K. Oikonomou, F.P. Fronimos, S.A. Venikoudis, Published in: Phys.Dark Univ. 30 (2020) 100718, e-Print: 2009.06113 [gr-qc]
5. **f(R) Gravity Phase Space in the Presence of Thermal Effects**, V.K. Oikonomou, F.P. Fronimos, N.Th. Chatzarakis, Physics of the Dark Universe Accepted, e-Print: 2009.12897
6. **Unifying Holographic Inflation with Holographic Dark Energy: a Covariant Approach**, Shinichi Nojiri, S.D. Odintsov, V.K. Oikonomou, Tanmoy Paul Published in: Phys.Rev.D 102 (2020) 2, 023540, e-Print: 2007.06829 [gr-qc]
7. **Extended Gravity Description for the GW190814 Supermassive Neutron Star**, Artyom V. Astashenok, Salvatore Capozziello, Sergei D. Odintsov, Vasilis K. Oikonomou, e-Print: 2008.10884 [gr-qc]
8. **Bottom-up reconstruction of non-singular bounce in F(R) gravity from observational indices**, S.D. Odintsov, V.K. Oikonomou, Tanmoy Paul, Published in: Nucl.Phys. B (2020) 115159, e-Print: 2008.13201 [gr-qc]
9. V.K. Oikonomou and F. Fronimos,
“Reviving non-Minimal Horndeski-like Theories after GW170817: Kinetic Coupling Corrected Einstein-Gauss-Bonnet Inflation,”
arXiv:2006.05512 [gr-qc].
10. **From a Bounce to the Dark Energy Era with F(R) Gravity**, S.D. Odintsov, V.K. Oikonomou, Tanmoy Paul, Classical and Quantum Gravity Accepted, e-Print: 2009.09947 [gr-qc]
11. S. Odintsov and V.K. Oikonomou,
“Inflationary Attractors in $F(R)$ Gravity,”
Physics Letters B Accepted, arXiv:2005.12804 [gr-qc].
12. V.K. Oikonomou,
“Rectifying an Inconsistency in $F(R)$ Gravity Inflation,” EPL 130 (2020) no.1, 10006
arXiv:2004.10778 [gr-qc].

13. S. Odintsov, V.K. Oikonomou and F. Fronimos,
“ $f(R)$ Gravity k -Essence Late-time Phenomenology,”
Phys. Dark Univ. **29** (2020), 100563
arXiv:2004.08884 [gr-qc].
14. S. Odintsov and V.K. Oikonomou,
“Swampland Implications of GW170817-compatible Einstein-Gauss-Bonnet Gravity,”
Phys. Lett. B **805** (2020), 135437
arXiv:2004.00479 [gr-qc].
15. S. Odintsov, V.K. Oikonomou and F. Fronimos,
“Rectifying Einstein-Gauss-Bonnet Inflation in View of GW170817,”
arXiv:2003.13724 [gr-qc].
16. S. Odintsov and V.K. Oikonomou,
“Aspects of Axion $F(R)$ Gravity,”
EPL **129** (2020) no.4, 40001
arXiv:2003.06671 [gr-qc].
17. E. Elizalde, S. Odintsov, V.K. Oikonomou and T. Paul,
“Extended matter bounce scenario in ghost free $f(R, \mathcal{G})$ gravity compatible with GW170817,”
Nucl. Phys. B **954** (2020), 114984
arXiv:2003.04264 [gr-qc].
18. S. Nojiri, S. Odintsov, V. Oikonomou and A. A. Popov, **“Propagation of gravitational waves in Chern-Simons axion $F(R)$ gravity,”**
Phys. Dark Univ. **28** (2020), 100514
doi:10.1016/j.dark.2020.100514
arXiv:2002.10402 [gr-qc].
19. **“Geometric Inflation and Dark Energy with Axion $F(R)$ Gravity”**
S. D. Odintsov and V. K. Oikonomou.
arXiv:2001.06830 [gr-qc]
DOI:10.1103/PhysRevD.101.044009
Phys. Rev. D **101**, no. 4, 044009 (2020)
20. **“Unifying Inflation with Early and Late-time Dark Energy in $F(R)$ Gravity”**
S. Nojiri, S. D. Odintsov and V. K. Oikonomou.
Phys. Dark Univ. **29** (2020), 100602
arXiv:1912.13128 [gr-qc]
21. **“Thermodynamical correspondence of $f(R)$ gravity in Jordan and Einstein frames”**
G. G. L. Nashed, W. El Hanafy, S. D. Odintsov and V. K. Oikonomou.
arXiv:1912.03897 [gr-qc]
22. **“Constant-roll k -Inflation Dynamics”**
S. D. Odintsov and V. K. Oikonomou.
arXiv:1912.00475 [gr-qc]
DOI:10.1088/1361-6382/ab5c9d
Class. Quant. Grav. **37**, no. 2, 025003 (2020)

23. “**Ghost-free non-local $F(R)$ Gravity Cosmology**”
 S. Nojiri, S. D. Odintsov and V. K. Oikonomou.
Phys. Dark Univ. **28** (2020), 100541
 arXiv:1911.07329 [gr-qc]
24. “**Nonsingular bounce cosmology from Lagrange multiplier $F(R)$ gravity**”
 S. Nojiri, S. D. Odintsov, V. K. Oikonomou and T. Paul.
 arXiv:1910.03546 [gr-qc]
 DOI:10.1103/PhysRevD.100.084056
Phys. Rev. D **100**, no. 8, 084056 (2019)
25. “**A Study of an Einstein Gauss-Bonnet Quintessential Inflationary Model**”
 K. Kleidis and V. K. Oikonomou.
 arXiv:1909.05318 [gr-qc]
 DOI:10.1016/j.nuclphysb.2019.114765
Nucl. Phys. B **948**, 114765 (2019)
26. “**Propagation of Gravitational Waves in Chern-Simons Axion Einstein Gravity**”
 S. Nojiri, S. D. Odintsov, V. K. Oikonomou and A. A. Popov.
 arXiv:1909.01324 [gr-qc]
 DOI:10.1103/PhysRevD.100.084009
Phys. Rev. D **100**, no. 8, 084009 (2019)
27. “**Canonical scalar field inflation with a Woods-Saxon potential**”
 V. K. Oikonomou and N. T. Chatzarakis.
 arXiv:1908.09218 [gr-qc]
 DOI:10.1016/j.aop.2019.167999
Annals Phys. **411**, 167999 (2019)
28. “**Autonomous Dynamical System of Einstein-Gauss-Bonnet Cosmologies**”
 N. Chatzarakis and V. K. Oikonomou.
Annals Phys. **419** (2020), 168216
 arXiv:1908.08141 [gr-qc]
29. “**Inflationary Phenomenology of Einstein Gauss-Bonnet Gravity Compatible with GW170817**”
 S. D. Odintsov and V. K. Oikonomou.
 arXiv:1908.07555 [gr-qc]
 DOI:10.1016/j.physletb.2019.134874
Phys. Lett. B **797**, 134874 (2019)
30. “**Generalized logarithmic equation of state in classical and loop quantum cosmology dark energy-dark matter coupled systems**”
 V. K. Oikonomou.
 arXiv:1907.02600 [gr-qc]
 DOI:10.1016/j.aop.2019.167934
Annals Phys. **409**, 167934 (2019)
31. “ **$F(R)$ Gravity with an Axion-like Particle: Dynamics, Gravity Waves, Late and Early-time Phenomenology**”
 S. Nojiri, S. D. Odintsov and V. K. Oikonomou.
Annals Phys. **418** (2020), 168186
 arXiv:1907.01625 [gr-qc]

32. “**Viable inflationary models in a ghost-free Gauss-Bonnet theory of gravity**”
 S. Nojiri, S. D. Odintsov, V. K. Oikonomou, N. Chatzarakis and T. Paul.
 arXiv:1907.00403 [gr-qc]
 DOI:10.1140/epjc/s10052-019-7080-1
Eur. Phys. J. C **79**, no. 7, 565 (2019)
33. “**Unification of Inflation with Dark Energy in $f(R)$ Gravity and Axion Dark Matter**”
 S. D. Odintsov and V. K. Oikonomou.
 arXiv:1905.03496 [gr-qc]
 DOI:10.1103/PhysRevD.99.104070
Phys. Rev. D **99**, no. 10, 104070 (2019)
34. “**The Phase Space of k -Essence $f(R)$ Gravity Theory**”
 V. K. Oikonomou and N. Chatzarakis.
Nucl. Phys. B **956** (2020), 115023
 arXiv:1905.01904 [gr-qc]
35. “**Classical and loop quantum cosmology phase space of interacting dark energy and superfluid dark matter**”
 V. K. Oikonomou.
 arXiv:1905.00826 [gr-qc]
 DOI:10.1103/PhysRevD.99.104042
Phys. Rev. D **99**, no. 10, 104042 (2019)
36. “ **k -essence $f(R)$ gravity inflation**”
 S. Nojiri, S. D. Odintsov and V. K. Oikonomou.
 arXiv:1902.03669 [gr-qc]
 DOI:10.1016/j.nuclphysb.2019.02.008
Nucl. Phys. B **941**, 11 (2019)
37. “**Effects of Spatial Curvature on the $f(R)$ Gravity Phase Space: no Inflationary Attractor?**”
 S. D. Odintsov and V. K. Oikonomou.
 arXiv:1902.01422 [gr-qc]
 DOI:10.1088/1361-6382/ab0505
Class. Quant. Grav. **36**, no. 6, 065008 (2019)
38. “ **$f(R)$ Gravity Inflation with String-Corrected Axion Dark Matter**”
 S. D. Odintsov and V. K. Oikonomou.
 arXiv:1901.05363 [gr-qc]
 DOI:10.1103/PhysRevD.99.064049
Phys. Rev. D **99**, no. 6, 064049 (2019)
39. “**Ghost-free Gauss-Bonnet Theories of Gravity**”
 S. Nojiri, S. D. Odintsov and V. K. Oikonomou.
 arXiv:1811.07790 [gr-qc]
 DOI:10.1103/PhysRevD.99.044050
Phys. Rev. D **99**, no. 4, 044050 (2019)
40. “**Logarithmic-corrected R^2 Gravity Inflation in the Presence of Kalb-Ramond Fields**”
 E. Elizalde, S. D. Odintsov, V. K. Oikonomou and T. Paul.

arXiv:1810.07711 [gr-qc]
DOI:10.1088/1475-7516/2019/02/017
JCAP **1902**, 017 (2019)

41. “**Finite-time Singularities in Swampland-related Dark Energy Models**”
S. D. Odintsov and V. K. Oikonomou.
arXiv:1810.03575 [gr-qc]
DOI:10.1209/0295-5075/126/20002
EPL **126**, no. 2, 20002 (2019)
42. “**Impact of Collisional Matter on the Late-Time Dynamics of $f(R, T)$ Gravity**”
M. Zubair, M. Zeeshan, S. S. Hasan and V. K. Oikonomou.
DOI:10.3390/sym10100463
Symmetry **10**, no. 10, 463 (2018).
43. “**Kinetic scalar curvature extended $f(R)$ gravity**”
S. V. Chervon, A. V. Nikolaev, T. I. Mayorova, S. D. Odintsov and V. K. Oikonomou.
arXiv:1810.01900 [gr-qc]
DOI:10.1016/j.nuclphysb.2018.10.003
Nucl. Phys. B **936**, 597 (2018)
44. “**Cosmological Fluids with Logarithmic Equation of State**”
S. D. Odintsov, V. K. Oikonomou, A. V. Timoshkin, E. N. Saridakis and R. Myrzakulov.
arXiv:1810.01276 [gr-qc]
DOI:10.1016/j.aop.2018.09.015
Annals Phys. **398**, 238 (2018)
45. “**Viable Inflation in Scalar-Gauss-Bonnet Gravity and Reconstruction from Observational Indices**”
S. D. Odintsov and V. K. Oikonomou.
arXiv:1808.05045 [gr-qc]
DOI:10.1103/PhysRevD.98.044039
Phys. Rev. D **98**, no. 4, 044039 (2018)
46. “**Autonomous dynamical system description of de Sitter evolution in scalar assisted $f(R) - \phi$ gravity**”
K. Kleidis and V. K. Oikonomou.
arXiv:1808.04674 [gr-qc]
DOI:10.1142/S0219887818502122
Int. J. Geom. Meth. Mod. Phys. **15**, no. 12, 1850212 (2018)
47. “**Dynamics of inflation and dark energy from $F(R, G)$ gravity**”
S. D. Odintsov, V. K. Oikonomou and S. Banerjee.
arXiv:1807.00335 [gr-qc]
DOI:10.1016/j.nuclphysb.2018.07.013
Nucl. Phys. B **938**, 935 (2019)
48. “**Dynamical Systems Perspective of Cosmological Finite-time Singularities in $f(R)$ Gravity and Interacting Multifluid Cosmology**”
S. D. Odintsov and V. K. Oikonomou.
arXiv:1806.07295 [gr-qc]
DOI:10.1103/PhysRevD.98.024013
Phys. Rev. D **98**, no. 2, 024013 (2018)

49. “**Study of finite-time singularities of loop quantum cosmology interacting multi-fluids**”
 S. D. Odintsov and V. K. Oikonomou.
 arXiv:1806.01588 [gr-qc]
 DOI:10.1103/PhysRevD.97.124042
Phys. Rev. D **97**, no. 12, 124042 (2018)
50. “**Is a Topology Change After a Big Rip Possible?**”
 V. K. Oikonomou.
 arXiv:1805.11945 [gr-qc]
51. “**Scalar Field Assisted $f(R)$ Gravity Inflation**”
 K. Kleidis and V. K. Oikonomou.
 arXiv:1803.10748 [gr-qc]
 DOI:10.1142/S0219887818501372
Int. J. Geom. Meth. Mod. Phys. **15**, no. 08, 1850137 (2018)
52. “**Viable inflationary evolution from Einstein frame loop quantum cosmology**”
 J. De Haro, S. D. Odintsov and V. K. Oikonomou.
 arXiv:1802.09024 [gr-qc]
 DOI:10.1103/PhysRevD.97.084052
Phys. Rev. D **97**, no. 8, 084052 (2018)
53. “**Attractor cosmology from nonminimally coupled gravity**”
 S. D. Odintsov and V. K. Oikonomou.
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 DOI:10.1103/PhysRevD.97.064005
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