PROFESIONAL CURRICULUM VITAE

PERSONAL DATA

Name:	Darius Jurčiukonis
Birth date / Birthplace:	1979-02-15 / Lazdijai, Lithuania
Nationality:	Lithuanian
E-mail:	darius.jurciukonis@tfai.vu.lt; darius.jurciukonis@cern.ch
OCID:	0000-0002-2729-557X
Web of Science:	FDF-6465-2022
ResearchGate:	https://www.researchgate.net/profile/Darius-Jurciukonis
VU ITPA:	https://www.ff.vu.lt/en/itpa/staff/jurciukonis
Languages:	Lithuanian, English, French, Russian

EDUCATION

1997–2001	Department of Physics, Vilnius University, Lithuania, BSc degree (graduation thesis: *Research of photoelectrons polarisation from Na atom 2p state*).
1998–2002	Military Academy, lieutenant's degree.
2000–2001	Mobility studies in J. Fourier University, France, (ERASMUS/SOCRATES program).
2001–2003	Department of Physics, Vilnius University, Lithuania, MSc degree (graduation thesis: *Baryons as canonical quantized solitons in SU(3) Skyrme model*).
2003–2008	Vilnius University, Institute of Theoretical Physics and Astronomy, Lithuania, PhD studies (thesis: *Canonical quantization of SU(3) topological solitons*).

EMPLOYMENTS

2002–2003	Engineer (Institute of Theoretical Physics and Astronomy (ITPA)).
2006–2009	Junior researcher (Vilnius University, ITPA).
2009–2013	Researcher (Vilnius University, ITPA).
2011–2012	Postdoc researcher (Vilnius University).
2013–2018	Researcher (Vilnius University, ITPA).
2018–	Senior researcher (Vilnius University, Physics faculty, ITPA).

RESEARCH INTERESTS

- Skyrme model (mathematical and phenomenological aspects).
- Nuclear physics (nuclear interaction models, few-body problem).
- Higgs and Neutrino physics (development of phenomenological models, Higgs doublet models, seesaw neutrinos, group theory, AI/ML applications in physics).

RESEARCH PROJECTS

1. 2006: primary project implementer in the National Lithuanian Science and Study Foundation project „Light nucleus electrical form factor analysis with topological soliton model“ (T-06034).
2. 2011 – 2012: principal project implementer in the Lithuanian Post-doctoral Studies project „Cross-section studies of the reaction between two electroweak Z bosons“ (60/MTDS-550000-2032).
3. 2013: primary project implementer in the Lithuanian Science Academy’s collaboration project with CERN „Influence of the neutrino sector to polarize experiments in the Large Hadron Collider“ (CERN-VU-2013-3|LNS-550000-1712).
4. 2014: primary project implementer in the Lithuanian Science Academy’s collaboration project with CERN “Physics of subatomic particles in the CERN CMS experiment (DaFi2014)“ (CERN-VU-2014-1|LNS-14100-743).
5. 2015: primary project implementer in the Lithuanian Science Academy’s collaboration project with CERN “Physics of subatomic particles in the CERN CMS experiment (DaFi2015)“ (CERN-VU-2015-1|LNS-1000-1028).
6. 2015 – 2017: primary project implementer in the Research Council of Lithuania project „Theoretical study of three-particle nuclear reactions“ (MIP-094/2015).
7. 2016: primary project implementer in the Lithuanian Science Academy’s collaboration project with CERN “Physics of subatomic particles in the CERN CMS experiment (DaFi2016)“.
8. 2017: primary project implementer in the Lithuanian Science Academy’s collaboration project with CERN “Physics of subatomic particles in the CERN CMS experiment (DaFi2017)“.
9. 2018: primary project implementer in the Lithuanian Science Academy’s collaboration project with CERN “Physics of subatomic particles in the CERN CMS experiment (DaFi2018)“.
10. 2019 – 2020: primary project implementer in the Lithuanian Science Academy’s collaboration project with CERN “Physics of subatomic particles in the CERN CMS experiment (DaFi2019)“.
11. 2021 – 2022: primary project implementer in the Lithuanian Science Academy’s collaboration project with CERN “Physics of subatomic particles in the CERN CMS experiment (DaFi2021)“.
12. 2022 – 2025: primary project implementer in the Research Council of Lithuania project „Few-cluster nuclear reactions: towards many-body problem“ (S-MIP-22-72).
13. 2022 – 2027: primary project implementer in the Lithuanian Ministry of Education, Science and Sport project “Implementation of the tasks of the Action Plan for Lithuania's Associate Membership in the European Organization for Nuclear Research 2022-2027”, No. CERN 2022-2027.
14. 2024 – 2027: principal project investigator in the Research Council of Lithuania project „Nuclear and particle physics studies applying machine learning“ (CERN-24-2).

CONFERENCES (main speaker)

1. *Constraints on large scalar multiplets added to the Standard Model*
   29th International Symposium on Particles, String and Cosmology (PASCOS 2024) in Quy Nhon, Vietnam, 7-13 July, 2024
2. *Predicting Unitarity and Bounded from Below Constraints Using Machine Learning*
   The conference "Scalars 2023", Warsaw, Poland, September 13-16, 2023
3. *Machine Learning for Prediction of Unitarity and Bounded from Below Constraints*
   The European physical society conference on high energy physics (EPS-HEP2023), Hamburg, Germany, August 20-25, 2023
4. *The cyclic symmetries in the representations of unitary discrete subgroups*
   8th Symposium on Prospects in the Physics of Discrete Symmetries (DISCRETE 2022), Baden-Baden, Germany, November 07-11, 2022
5. *The $Zb\bar{b}$ vertex in a left-right model*
   2nd CERN Baltic Conference (CBC 2022), Vilnius, Lithuania, October 10-12, 2022
6. *The $Zb\bar{b}$ couplings in models with extended Higgs sectors*
   1st CERN Baltic Conference (CBC 2021), online conference, June 28-30, 2021
7. *Nine Lepton Flavor Changing Decays*
   The XXIX international conference on neutrino physics and astrophysics (NEUTRINO2020), online conference, June 22-July 2, 2020
8. *Four new lepton-mixing textures*
   The 27th International Workshop on Weak Interactions and Neutrinos (WIN2019), Bari, Italy, June 3-8, 2019
9. *Higgs masses and couplings in a general 2HDM with unitarity bounds*
   39th international conference on high energy (ICHEP2018), Seoul, South Korea, July 4-11, 2018
10. *Lepton flavour changing Higgs boson decays in a two-Higgs-doublet seesaw model*
    42nd National Lithuanian physics conference, Vilnius, Lithuania, October 4-6, 2017
11. *Lepton flavour violation in a two-Higgs-doublet seesaw model*
    The 26th International Workshop on Weak Interactions and Neutrinos (WIN2017), Irvine, USA, June 19-24, 2017
12. *Numerical analysis of SO(10) models with flavour symmetries*
    38th international conference on high energy (ICHEP2016), Chicago, USA, August 3-10, 2016
13. *A minimal seesaw model with the mu-tau symmetry*
    The European physical society conference on high energy physics (HEP2015), Vienna, Austria, July 22-29, 2015
14. *Neutrino mass and oscillation angles in the model with one heavy neutrino added*
    41st National Lithuanian physics conference, Vilnius, Lithuania, June 17-19, 2015
15. *Light neutrino mass spectrum with one or two right-handed singlet fermions added*
    37th international conference on high energy (ICHEP2014), Valencia, Spain, July 2-9, 2014
16. *Neutrino mass spectrum from the seesaw mechanism with the second Higgs doublet added* 26-th international conference on neutrino physics and astrophysics (NEUTRINO2014), Boston, USA, June 2-7, 2014
17. *Calculation of absolute neutrino masses in the seesaw extension*
    19th international symposium on particles, strings and cosmology (PASCOS2013), Taipei, Taiwan, November 20-26, 2013

18. *Calculation of neutrimo mass in the seesaw extension*
    40th National Lithuanian physics conference, Vilnius, Lithuania, June 10-12, 2013
19. *Nucleon electromagnetic form factors in the topological soliton model*
    40th National Lithuanian physics conference, Vilnius, Lithuania, June 10-12, 2013
20. *Neutrino mass spectrum from the seesaw extension*
    International symposium on multiparticle dynamics, Kielce, Poland, September 16-21, 2012
21. *Parametrizing the Neutrino sector of the seesaw extension in tau decays*
    36th International Conference on High Energy Physics (ICHEP2012), Melbourne, Australia, July 4-11, 2012
22. *Parameters of the Neutrino sector in tau decays*
    Physics at LHC – 2012 (PLHC2012), Vancouver, Canada, June 4-9, 2012
23. *Quantization of rational map soliton in noncanonical SU(3) basis*
    37th National Lithuanian physics conference, Vilnius, Lithuania, June 11-13, 2007
24. *Noncanonical embedded rational map soliton in quantum SU(3) Skyrme model*
    5th International Symposium "Quantum Theory and Symmetries" (QTS-5), Valladolid, Spain, July 22-28, 2007
25. *Quantum SU(3) Skyrme model for arbitrary representation*
    4th International Symposium "Quantum Theory and Symmetries" (QTS-4), Varna, Bulgaria, August 15-21, 2005
26. *Canonical quantization of SU(3) Skyrme model*
    36th National Lithuanian physics conference, Vilnius, Lithuania, June 16-18, 2005
27. *Analytical calculations in SU(3) group algebra and applications to quantum Skyrme model*
    Conference on Computational Physics (CCP 2004), Genova, Italy, September 1-4, 2004
28. *Spin polarization of photoectrons in the inner-shell ionization of excited Na atoms*
    34th EGAS Conference, Sofia, Bulgaria, July 9-12, 2002
29. *Investigation of photoelectron polarization from Na atom 2p state*
    4th Students Scientific Conference "Free Readings 2002", Vilnius, April 19, 2002

ACTIVITY

1. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, November 04-16, 2024
2. Central-Technical shifts (DCS) in European Organization for Nuclear Research (CERN), Geneva, Switzerland, September 15 – October 12, 2024
3. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, November 05-18, 2023
4. Central-Technical shifts (DCS) in European Organization for Nuclear Research (CERN), Geneva, Switzerland, September 18 – October 12, 2023
5. Short term visit to Theory Department (CERN), Geneva, Switzerland, March 12-23, 2023, including participation in "CERN Neutrino Platform Pheno Week 2023" March 13-17, 2023
6. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, October 16-29, 2022
7. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, June 26 – July 09, 2022, including participation in "9th Workshop on Flavour

Symmetries and Consequences in Accelerators and Cosmology (FLASY2022)", June 27 – July 01, 2022

8. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, September 26 – October 16, 2021
9. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, November 03-23, 2019
10. Short term visit to Theory Department (CERN), Geneva, Switzerland, September 29 – October 26, 2019, including participation in "CERN Neutrino Platform Week: Hot Topics in Neutrino Physics" October 07-11, 2019
11. Short term visit to Theory Department (CERN), Geneva, Switzerland, November 25-30, 2018
12. Central-Technical shifts (DCS) in European Organization for Nuclear Research (CERN), Geneva, Switzerland, October 25 – November 17, 2018
13. European Neutrino "Town" meeting and ESPP 2019 discussion (CERN), Geneva, Switzerland, October 22-24, 2018
14. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, October 1-13, 2018
15. Central-Technical shifts (DCS) in European Organization for Nuclear Research (CERN), Geneva, Switzerland, October 21 – November 17, 2017
16. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, October 1-14, 2017
17. Central-Technical shifts (DCS) in European Organization for Nuclear Research (CERN), Geneva, Switzerland, November 28 – December 13, 2016
18. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, June 12-25, 2016
19. Central-Technical shifts (DCS) in European Organization for Nuclear Research (CERN), Geneva, Switzerland, November 22-28, 2015
20. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, October 4-24, 2015
21. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, June 7-21, 2015
22. Scientific visit to the Würcburg University, Würcburg, Germany, November 23 – December 6, 2014
23. Scientific visit to the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, October 13-27, 2013
24. Internship at the Federiko Santa Maria technical university, Valparaiso, Chile, November 17 – December 16, 2012. Talk: *Neutrino mass spectrum from the seesaw extension.*
25. School of Symbolic Computation in Theoretical Physics: Integrability and super-Yang-Mills, San Paulo, Brazil, November 03-17, 2012
26. Internship at the Centre for Theoretical Particle Physics (CFTP), University of Lisbon, Lisbon, Portugal, September 30 – October 29, 2012
27. Internship at the European Organization for Nuclear Research (CERN), Geneva, Switzerland, April 15 – May 13, 2012
28. Internship at the European Organization for Nuclear Research (CERN), Geneva, Switzerland, March 20 – April 18, 2011
29. Practical courses „Using Physics Analysis Toolkit in CMS data analysis" in European Organization for Nuclear Research (CERN), Geneva, Switzerland, September 20-24, 2010

30. 21st Summer School – seminar: Volga 2009, Kazan, Tatarstan, Russia, June 22 – July 3, 2009
31. 26th Jerusalem Winter School in Theoretical Physics: Particle Physics in the Age of the LHC, Jerusalem, Israel, December 29, 2008 – January 8, 2009
32. PASC winter school, Sesimbra, Portugal, December 17-19, 2008
33. First training school: School in Symbolic Computation RISC, Linz, Austria, February 5-18, 2007
34. CERN School of Computing, Helsinki, Finland, August 21 – September 1, 2006
35. PSI Zuoz Summer School on Particle Physics: Effective Theories in Particle Physics, Zuoz, Switzerland, July 16-22, 2006
36. The 2006 European School of High-Energy Physics, Aronsborg, Sweden, June 18 – July 1, 2006
37. Duty journey in European Organization for Nuclear Research (CERN), Geneva, Switzerland, December, 2005
38. 6th Nordic Summer School in Nuclear Physics, Hillerød, Denmark, August 8-19, 2005. Talk: *SU(3) Skyrme model.*
39. COST P10 Summer School: Physics in Warsaw 2004, Warsaw, Poland, September 20 – October 2, 2004. Talk: *Baryons like solitons*.
40. Nordita Master Class in Physics, Hillerød, Denmark, August 3-10, 2003
41. 13th Summer School on Computing Techniques in Physics: Parallelization of Algorithms in Physics, Trest, Czech Republic, September 16-21, 2002
42. 12th Jyväskylä Summer School, Jyväskylä, Finland, August 12-30, 2002

PUBLICATIONS (published in peer-reviewed journals included in ISI Web of Science register)

1. E. Cravo, R. Crespo, A. Deltuva and D. Jurčiukonis, *Disentangling single-particle and collective signatures in ^{12}C (p,2p)^{11}Be reactions*, Phys. Lett. B 861 (2025) 139253.
2. A. Deltuva and D. Jurčiukonis, *Deuteron-3He scattering using nucleon-3He optical potentials fitted to four-body amplitudes*, Phys. Lett. B 860 (2025) 139151.
3. A. Deltuva and D. Jurčiukonis, *Nonlocal interaction and collective excitation in deuteron breakup on the ^{24}Mg nucleus*, Phys. Rev. C **110** (2024) 3, 034615.
4. A. Deltuva, E. Cravo, R. Crespo and D. Jurčiukonis, *Interplay of single-particle and collective modes in the ^{12}C(p,2p) reaction near 100 MeV*, Phys. Lett. **B** 855 (2024) 138859.
5. A. Deltuva, D. Jurčiukonis, D. Likandrovas, J. Torres Fernandez, *Three-Body Calculation Of Deuteron–Nucleus Scattering Using Microscopic Global Optical Potential*, Few Body Syst. 65 (2024) 3, 68.
6. D. Jurčiukonis and L. Lavoura, *On the Addition of a Large Scalar Multiplet to the Standard Model*, PTEP **2024** (2024) 8, 083B06.
7. F. Albergaria, D. Jurčiukonis and L. Lavoura, *The oblique parameters from arbitrary new fermions*, JHEP 05 (2024) 190.
8. A. Deltuva and D. Jurčiukonis, *Nonlocal optical potential in inelastic deuteron scattering off ^{24}Mg*, Phys. Rev. C **107** (2023) 6, 064602.
9. A. Deltuva and D. Jurčiukonis, *Nonlocal optical potential with core excitation in ^{10}Be (d,p)^{11}Be and ^{11}Be (p,d)^{10}Be reactions*, Phys. Lett. B 840 (2023) 137867.
10. D. Jurčiukonis and L. Lavoura, *The $Zb\bar{b}$ vertex in a left–right model*, Nucl. Phys. B 996 (2023) 116373.
11. D. Jurčiukonis and L. Lavoura, *The centers of discrete groups as stabilizers of dark matter*, PTEP **2023** (2023) 2, 023B02.

12. D. Jurčiukonis and L. Lavoura, *Two-body lepton-flavour-violating decays in a 2HDM with soft family-lepton-number breaking*, JHEP 03 (2022) 106.
13. D. Jurčiukonis and L. Lavoura, *Fitting the $Zb\bar{b}$ vertex in the two-Higgs-doublet model and the three-Higgs-doublet model*, JHEP 07 (2021) 195.
14. E. H. Aeikens, P. M. Fereira, W. Grimus, D. Jurčiukonis and L. Lavoura, *Radiative seesaw corrections and charged-lepton decays in a model with soft flavour violation*, JHEP 12 (2020) 122.
15. S. Draukšas, V. Dūdėnas, T. Gajdosik, A. Juodagalvis, P. Juodsnukis and D. Jurčiukonis, *The Grimus–Neufeld Model with FlexibleSUSY at One-Loop*, Symmetry 11, (2019) 11, 1418.
16. V. Dudenas, T. Gajdosik and D. Jurčiukonis, *Pole masses of neutrinos in the Grimus-Neufeld model*, Acta Phys. Polon. B50, (2019) 1737-1748.
17. D. Jurčiukonis, T. Gajdosik and A. Juodagalvis, *Seesaw neutrinos with one right-handed singlet field and a second Higgs doublet*, JHEP 11 (2019) 146.
18. L. Hlophe, Jin Lei, Ch. Elster, A. Nogga, F.M. Nunes, D. Jurčiukonis, A. Deltuva, *Deuteron-alpha scattering: separable vs nonseparable Faddeev approach*, Phys. Rev. C **100** no.3, 034609 (2019).
19. D. Jurčiukonis and L. Lavoura, *More models for lepton mixing with four constraints*, JHEP 1907 (2019) 157.
20. D. Jurčiukonis and L. Lavoura, *The three- and four-Higgs couplings in the general two-Higgs-doublet model*, JHEP 1812 (2018) 004.
21. D. Jurčiukonis and L. Lavoura, *Lepton mixing and the charged-lepton mass ratios*, JHEP 1803 (2018) 152.
22. P. Diaz Fernandez, A. Deltuva, D. Jurčiukonis *et all*, *Quasi-free (p,pn) scattering of light neutron-rich nuclei around N = 14*, Phys. Rev. C **97** no.2, 024311 (2018).
23. V. Dudenas, T. Gajdosik, A. Juodagalvis, D. Jurčiukonis, *The one-loop improved lagrangian of the Grimus-Neufeld model*, Acta Phys. Polon. B48, 12 (2017).
24. D. Jurčiukonis, L. Lavoura, *GAP listing of the finite subgroups of U(3) of order smaller than 2000*, PTEP 2017 no.5, 053A03 (2017).
25. D. Jurčiukonis, L. Lavoura, *Group-theoretical search for rows or columns of the lepton mixing matrix*, J.Phys. G44 no.4, 045003 (2017).
26. A. Deltuva, D. Jurčiukonis, E. Norvaišas, *Core-excitation effects in O20(d,p)O21 transfer reactions: Suppression or enhancement?*, Phys.Lett. B769, 202 (2017).
27. A. Deltuva, D. Jurčiukonis, *Calculation of three-body nuclear reactions with angular-momentum and parity-dependent optical potentials*, Phys. Rev. C **94**, 054619 (2016).
28. P. M. Ferreira, W. Grimus, D. Jurčiukonis and L. Lavoura, *Scotogenic model for co-bimaximal mixing*, JHEP 1607 (2016) 010.
29. P. M. Ferreira, W. Grimus, D. Jurčiukonis and L. Lavoura, *Flavour symmetries in a renormalizable SO(10) model*, Nuclear Phys. B 906, 289 (2016).
30. T. Gajdosik, A. Juodagalvis, D. Jurčiukonis, T. Sabonis, *Constrains on the Higgs sector from radiative mass generation on neutrinos*, Acta Phys. Polon. B46, 11, 2323 (2015).
31. T. Gajdosik, A. Juodagalvis, D. Jurčiukonis, T. Sabonis, *Progress in the parametrisation of the Neutrino sector*, Acta Phys. Polon. B44, 11, 2347 (2013).
32. D. Jurčiukonis, E. Norvaišas, *On quantization of the SU(2) Skyrmions*, Phys.Lett. B724 355 (2013).
33. D. Jurčiukonis, T. Gajdosik, A. Juodagalvis, T. Sabonis, *Neutrino mass spectrum from the seesaw extension*, Acta Phys. Polon. Supp. 6, No. 2, 675 (2013).

34. D. Jurciukonis, E. Norvaisas and V. Regelskis, *The Spectrum of the Baryon Masses in a Self-consistent SU(3) Quantum Skyrme Model*, Physica Scripta **87** 025101 (2013).
35. A. Juodagalvis, D. Jurčiukonis and CMS collaboration, *Measurement of the Drell-Yan cross section in pp collisions at* $\sqrt{s}$ *= 7 TeV*, Journal of high energy physics, vol. 2011, No. 10:007, (2011).
36. T. Gajdosik, A. Juodagalvis, D. Jurčiukonis, T. Sabonis, *Parametrizing the Neutrino sector*, Acta Physica Polonica B, vol. **42**, No. 11, 2407 (2011).
37. D. Jurčiukonis and E. Norvaišas, *SO(3) rational map soliton in quantum SU(3) Skyrme model*, Lithuanian J. Phys., **48**, No. 4, 305 (2008).
38. D. Jurčiukonis and E. Norvaišas, *Quantum SU(3) Skyrme model with noncanonical embedded SO(3) soliton*, J. Math. Phys., **48**, 052101 (2007).
39. D. Jurčiukonis, E. Norvaišas and D.O. Riska, *Canonical Quantization of SU(3) Skyrme Model in a General Representation*, J. Math. Phys., **46**, 072103 (2005).
40. D. Jurčiukonis and A. Kupliauskienė, *Investigation of the influence of valence electron excitation on the polarization of photoelectrons from Na atoms*, Lithuanian J. Phys., **41**, No. 3, 242 (2001).

PUBLICATIONS (published in other peer-reviewed journals)

1. D. Jurčiukonis, L. Lavoura, *The cyclic symmetries in the representations of unitary discrete subgroups*, PoS DISCRETE2022, (2024) 026.
2. D. Jurčiukonis, *Machine Learning for Prediction of Unitarity and Bounded from Below Constraints*, PoS EPS-HEP2023, (2024) 494.
3. D. Jurčiukonis, L. Lavoura, *Higgs masses and couplings in a general 2HDM with unitarity bounds*, PoS ICHEP2018, (2019) 334.
4. D. Jurčiukonis, P.M. Ferreira, W. Grimus, L. Lavoura, *Numerical analysis of SO(10) models with flavour symmetries*, PoS ICHEP2016, 1187 (2017).
5. D. Jurčiukonis, T. Gajdosik, A. Juodagalvis, *Light neutrino mass spectrum with one or two right-handed singlet fermions added*, Nuclear and Particle Physics Proceedings 273–275, 2687 (2016).
6. T. Gajdosik, D. Jurčiukonis, A. Juodagalvis, *Impact of Majorana Neutrinos to Hadronic Tau Decays*, Nuclear and Particle Physics Proceedings 260 257–259 (2015).
7. D. Jurčiukonis, T. Gajdosik and A. Juodagalvis, *A minimal seesaw model with the mu-tau symmetry*, PoS(EPS-HEP2015)081 (2015).
8. D. Jurčiukonis, T. Gajdosik, A. Juodagalvis and T. Sabonis, *Parametrizing the Neutrino sector of the seesaw extension in tau decays*, PoS ICHEP2012 372 (2013).
9. D. Jurčiukonis, T. Gajdosik, A. Juodagalvis and T. Sabonis, *Parameters of the Neutrino sector in tau decays*, Physics at LHC-2012 konferencija, elektroninė publikacija SLAC eConf duomenų bazėje.
10. D. Jurčiukonis and E. Norvaišas, *Noncanonical embedded rational map soliton in quantum SU(3) Skyrme model*, 2008 J. Phys.: Conf. Ser. **128** 012007 (2008).

11. D. Jurčiukonis and E. Norvaišas, *Quantum SU(3) Skyrme model for arbitrary representation*, Bulg. J. Phys., **33** (s1b), 933 (2006).

PUBLICATIONS (science popularization)

1. D. Jurčiukonis and A. Juodagalvis, Didysis hadronų greitintuvas atveria fizikos paslaptis, Mokslas ir gyvenimas, No. 4 (22-25 pg.) and 5-6 (23-25 pg.), 2012.

SCIENCE OUTREACH ACTIVITIES

1. 2016: A guide for the CERN exhibition “Accelerating Science” in Vilnius.
2. 2017: A guide for a CMS Virtual Visit from Lithuania during the science event Researchers' Night.
3. From 2018: Participation in organizing "Hadron Therapy" and "CMS Masterclasses" for students.
4. 2023: A guide for a CMS Virtual Visit from Lithuania during the science event Researchers' Night (https://www.youtube.com/watch?v=JFf3w03MxW4).

EXPERT ACTIVITIES

- Reviewed publications for the following journals: *Journal of High Energy Physics, Journal of Physics Communications, European Physical Journal C, J. Phys. G: Nucl. Part. Phys., PoS (SISSA),* and the *Lithuanian Journal of Physics*.
- Member of the Research Group Board of the Lithuanian Particle Physics Consortium (VU, KTU, and LSMU) since 2022. Contributes to the formulation of Lithuania's high-energy physics science policy in collaboration with CERN activities.
- Leader of the theoretical elementary particle physics group within the Lithuanian Particle Physics Consortium.

EDUCATIONAL ACTIVITIES

- Participation in seminars and discussions; contribution to the training of doctoral students.
- Consulting doctoral students and researchers on numerical and analytical computation methods.
- Participation in the defense committees for student theses.
- Reviewer of Bachelor's, Master's, and PhD theses.
- Supervision of Bachelor's theses.