

Библиографија

A. Теоријска нуклеарна физика

1. Bithika Karmakar, Dusan Zivic, Marko Djordjevic, Pasi Huovinen, Magdalena Djordjevic and Jussi Auvinen, *Probing the shape of the quark-gluon plasma droplet via event-by-event quark-gluon plasma tomography*, Phys. Rev. C **110**, 044906 (2024).
2. Ron Belmont, *et al.*, Predictions for the sPHENIX physics program, Nucl. Phys. A **1043**, 122821 (2024).
3. Bithika Karmakar, Dusan Zivic, Igor Salom, Jussi Auvinen, Pasi Huovinen, Marko Djordjevic and Magdalena Djordjevic, *Constraining η/s through high-pt theory and data*, Phys. Rev. C **108**, 044907 (2023).
4. Stefan Stojku, Bojana Ilic, Igor Salom and Magdalena Djordjevic, Importance of higher orders in opacity in quark-gluon plasma tomography, Phys. Rev. C **108**, 044905 (2023).
5. Stefan Stojku, Jussi Auvinen, Pasi Huovinen, Marko Djordjevic, Magdalena Djordjevic, *Initial time τ_0 constrained by high-pt data*, Acta Phys. Polon. Supp. **16**, 1-A156 (2023).
6. Stefan Stojku, Jussi Auvinen, Lidija Zivkovic, Pasi Huovinen, Magdalena Djordjevic, *Jet-perceived anisotropy revealed through high- p_\perp data*, Phys. Lett. B **835**, 137501 (2022).
7. Dusan Zivic, Jussi Auvinen, Igor Salom, Pasi Huovinen and Magdalena Djordjevic, *Importance of higher harmonics and v_4 puzzle in quark-gluon plasma tomography*, Phys. Rev. C **106**, 044909 (2022).
8. Bojana Ilic, Magdalena Djordjevic, *Understanding mass hierarchy in collisional energy loss through heavy flavor data*, Phys. Rev. C **106**, 014902 (2022).
9. Stefan Stojku, Jussi Auvinen, Marko Djordjevic, Pasi Huovinen, Magdalena Djordjevic, *Early evolution constrained by high-pt quark-gluon plasma tomography*, Phys. Rev. C **105**, L021901 (2022).
10. Dusan Zivic, Igor Salom, Jussi Auvinen, Pasi Huovinen and Magdalena Djordjevic, *DREENA-A framework as a QGP tomography tool*, Front. Phys. **10**, 957019 (2022).

11. Stefan Stojku, Bojana Ilic, Marko Djordjevic, Magdalena Djordjevic, *Extracting the temperature dependence in high- p_T particle energy loss*, Phys. Rev. C **103**, 024908 (2021).
12. Bojana Ilic, Dusan Zivic, Marko Djordjevic and Magdalena Djordjevic, *Utilizing high- p_\perp theory and data to constrain the initial stages of quark-gluon plasma*, International Journal of Modern Physics E **30**, 2141007 (2021).
13. Magdalena Djordjevic, Stefan Stojku, Dusan Zivic, Bojana Ilic, Jussi Auvinen, Igor Salom, Marko Djordjevic, Pasi Huovinen, *From high p_\perp theory and data to inferring anisotropy of Quark-Gluon Plasma*, Nucl. Phys. A **1005**, 121900 (2021).
14. Dusan Zivic, Bojana Ilic, Marko Djordjevic, Magdalena Djordjevic, *Exploring the initial stages in heavy-ion collisions with high- p_\perp R_{AA} and v_2 theory and data*, Phys. Rev. C **101**, 064909 (2020).
15. Magdalena Djordjevic, Stefan Stojku, Marko Djordjevic and Pasi Huovinen, *How to infer the shape of the QGP droplet from the data*, Phys. Rev. C Rapid Communications **100**, 031901 (2019).
16. Magdalena Djordjevic, Dusan Zivic, Marko Djordjevic, Jussi Auvinen, *How to test path-length dependence in energy loss mechanisms: analysis leading to a new observable*, Phys. Rev. C Rapid Communications **99**, 061902 (2019).
17. Dusan Zivic, Igor Salom, Jussi Auvinen, Marko Djordjevic, Magdalena Djordjevic, *DREENA-C framework: joint R_{AA} and v_2 predictions and implications to QGP tomography*, J Phys. G **46**, 085101 (2019).
18. Dusan Zivic, Igor Salom, Jussi Auvinen, Marko Djordjevic, Magdalena Djordjevic, *DREENA-B framework: first predictions of R_{AA} and v_2 within dynamical energy loss formalism in evolving QCD medium*, Phys. Lett. B **791**, 236 (2019).
19. Bojana Blagojevic, Marko Djordjevic, Magdalena Djordjevic, *Calculating hard probe radiative energy loss beyond the soft-gluon approximation: Examining the approximation validity*, Phys. Rev. C **99**, 024901 (2019).
20. Magdalena Djordjevic, Dusan Zivic, Bojana Blagojevic, Jussi Auvinen, Igor Salom, Marko Djordjevic, *Dynamical energy loss formalism: from describing suppression patterns to implications for future experiments*, Proc. of the Quark Matter 2018, Nucl. Phys. A **982**, 699 (2019).
21. R. Rapp (ed.), *et al.*, Extraction of heavy flavor transport coefficients in QCG matter, Nucl. Phys. A **979**, 21 (2018).

22. G. Aarts *et al.*, *Heavy-flavor production and medium properties in high-energy nuclear collisions - What next?* Eur. Phys. J. A **53** 5, 93 (2017).
23. Magdalena Djordjevic, *Complex suppression patterns distinguish between major energy loss effects in Quark–Gluon Plasma*, Phys. Lett. B **763** 439 (2016).
24. Magdalena Djordjevic, Bojana Blagojevic, Lidija Zivkovic, *Mass tomography at different momentum ranges in quark-gluon plasma*, Phys. Rev. C **94** 4, 044908 (2016).
25. Magdalena Djordjevic, *Dynamical energy loss as a novel Quark–Gluon Plasma tomographic tool*, Proc. of the Quark Matter 2015, Nucl. Phys. A **956** 633 (2016).
26. A. Andronic *et al.*, *Heavy-flavour and quarkonium production in the LHC era: from proton–proton to heavy-ion collisions*, Eur. Phys. J. C **76** 3, 107 (2016).
27. Magdalena Djordjevic and Marko Djordjevic, *Predictions of heavy-flavor suppression at 5.1 TeV Pb + Pb collisions at the CERN Large Hadron Collider*, Phys. Rev. C **92** 2, 024918 (2015).
28. Bojana Blagojevic and Magdalena Djordjevic, *Importance of different energy loss effects in jet suppression at RHIC and LHC*, J. Phys. G **42**, 075105 (2015) (highlighted in LabTalk).
29. Magdalena Djordjevic, *Heavy flavor puzzle at LHC: a serendipitous interplay of jet suppression and fragmentation*, Phys. Rev. Lett. **112**, 042302 (2014).
30. Magdalena Djordjevic, Marko Djordjevic and Bojana Blagojevic, *RHIC and LHC jet suppression in non-central collisions*, Phys. Lett. B **737** 298-302 (2014).
31. Magdalena Djordjevic and Marko Djordjevic, *LHC jet suppression of light and heavy flavor observables*, Phys. Lett. B **734**, 286 (2014).
32. Magdalena Djordjevic and Marko Djordjevic, *Heavy flavor puzzle from data measured at the BNL Relativistic Heavy Ion Collider: Analysis of the underlying effects*, Phys. Rev. C **90**, 034910 (2014).
33. Magdalena Djordjevic and Marko Djordjevic, *Understanding the strong suppression patterns at RHIC and LHC*, Mod. Phys. Lett. A **29**, 1430035, 2014.
34. Magdalena Djordjevic and Marko Djordjevic, *Explaining the fine hierarchy in pion and kaon suppression at LHC: Importance of fragmentation functions*, J. Phys. G **41**, 055104 (2014).

35. Magdalena Djordjevic, *Light and heavy flavor phenomenology at RHIC and LHC*, Proc. of the Hard Probes 2013, Nucl. Phys. A **932**, 302 (2014).
36. Magdalena Djordjevic, *Theoretical predictions of jet suppression: A systematic comparison with RHIC and LHC data*, Proc. of the Quark Matter 2014, Nucl. Phys. A **931**, 505 (2014).
37. Magdalena Djordjevic, Heavy flavor suppression in a dynamical QCD medium with finite magnetic mass, Proc. of the Hard Probes 2012, Nucl. Phys. A **910-911**, 203 (2013).
38. Magdalena Djordjevic, *Jet suppression of pions and single electrons at Au+Au collisions at RHIC*, Phys. Rev. C **85**, 034904 (2012).
39. Magdalena Djordjevic and Marko Djordjevic, *Generalization of radiative jet energy loss to non-zero magnetic mass*, Phys. Lett. B **709**, 229 (2012).
40. Magdalena Djordjevic, *Magnetic and electric contributions to the energy loss in a dynamical QCD medium*, J. Phys. G **39**, 045007 (2012).
41. Magdalena Djordjevic, *Theoretical formalism of radiative jet energy loss in a finite size dynamical QCD medium*, Phys. Rev. C **80**, 064909 (2009) (highlighted in: M Gyulassy, Physics **2**, 107 (2009)).
42. Magdalena Djordjevic, *Dynamical Effects on Jet Energy Loss in QCD Medium*, Nucl. Phys. A **830**, 163C (2009).
43. Magdalena Djordjevic and Ulrich Heinz, *Radiative energy loss in a finite size dynamical QCD matter*, Phys. Rev. Lett. **101**, 022302 (2008).
44. Magdalena Djordjevic and Ulrich Heinz, *Radiative heavy quark energy loss in a dynamical QCD medium*, Phys. Rev. C **77**, 024905 (2008).
45. Magdalena Djordjevic and Ulrich Heinz, *Effect of dynamical QCD medium on radiative heavy quark energy loss*, J. Phys. G **35**, 054001 (2008).
46. Magdalena Djordjevic, *Heavy quark energy loss: Radiative vs. Collisional*, Proc. of the Hard Probes 2006, Nucl. Phys. A **783**, 197 (2007).
47. Simon Wicks, William Horowitz, Magdalena Djordjevic and Miklos Gyulassy, *Heavy Quark Jet Quenching with Collisional plus Radiative Energy Loss and Path Length Fluctuations*, Proc. of the Hard Probes 2006, Nucl. Phys. A **783**, 493 (2007).
48. Simon Wicks, William Horowitz, Magdalena Djordjevic, Miklos Gyulassy, *Heavy quark tomography of A+A including elastic and inelastic energy loss*, Nucl. Phys. A **784**, 426 (2007).

49. Magdalena Djordjevic, *Collisional energy loss in a finite size QCD matter*, Phys. Rev. C **74**, 064907 (2006).
50. Magdalena Djordjevic, *Transition radiation in QCD matter*, Rhys. Rev. C **73**, 044912 (2006)
51. Magdalena Djordjevic, Miklos Gyulassy, Simon Wicks and Ramona Vogt, *Influence of bottom quark jet quenching on single electron tomography of Au + Au.*, Phys. Lett. B **632**, 81 (2006).
52. Magdalena Djordjevic, *Overview of heavy quark energy loss puzzle at RHIC*, Proc. of the Intl. Conference on Strangeness in Quark Matter (SQM 2006), J. Phys. G **32**, S333 (2006).
53. Magdalena Djordjevic, Miklos Gyulassy, Ramona Vogt and Simon Wicks, *The single electron puzzle at RHIC*, Nucl. Phys. A **774**, 689 (2006).
54. Magdalena Djordjevic, Miklos Gyulassy and Simon Wicks, *Open Charm and Beauty at Ultrarelativistic Heavy Ion Colliders*, Phys. Rev. Lett. **94**, 112301 (2005).
55. Magdalena Djordjevic, Miklos Gyulassy and Simon Wicks, *Charm and Beauty at RHIC and LHC*, Eur. Phys. J. C **43**, 135 (2005).
56. Magdalena Djordjevic and Miklos Gyulassy, *Charm Quark Suppression and Elliptic Flow at RHIC*, Acta Phys. Hung. A **24**, 313 (2005).
57. Magdalena Djordjevic and Miklos Gyulassy, *Heavy Quark Radiative Energy Loss in QCD Matter*, Nucl. Phys. A **733**, 265 (2004).
58. Magdalena Djordjevic and Miklos Gyulassy, *Heavy quark energy loss: Applications to RHIC*, J. Phys. G **30**, S1183 (2004).
59. Magdalena Djordjevic and Miklos Gyulassy, *Charm quark energy loss at RHIC*, Acta Phys. Hung. A **21**, 365 (2004).
60. Magdalena Djordjevic and Miklos Gyulassy, *Ter-Mikayelian Effect on QCD Radiative Energy Loss*, Phys. Rev. C **68**, 034914 (2003).
61. Magdalena Djordjevic and Miklos Gyulassy, *Where is the charm quark energy loss at RHIC*, Phys. Lett. B **560**, 37 (2003).
62. Istok Mendas, Marko Djordjevic and Magdalena Markovic, *Properties of the nonclassical maximum-entropy states*, J. Phys. A: Math. Gen. **33**, 921 (2000).

B. Теоријска биологија

63. Magdalena Djordjevic, Lidija Zivkovic, Hong-Yu Ou, Marko Djordjevic, *Nonlinear regulatory dynamics of bacterial restriction-modification systems*

modulates horizontal gene transfer susceptibility, Nucleic Acids Research, in press (2025).

- 64.Bojana Ilic, Igor Salom, Marko Djordjevic, Magdalena Djordjevic, *An analytical framework for understanding infection progression under social mitigation measures*, Nonlinear Dyn, 1-25 (2023)
65. Marko Djordjevic, Sofija Markovic, Igor Salom, Magdalena Djordjevic, *Understanding risk factors of a new variant outburst through global analysis of Omicron transmissibility*, Environ. Res. **216**, 114446 (2023).
66. Sofija Markovic, Andjela Rodic, Igor Salom, Ognjen Milicevic, Magdalena Djordjevic, Marko Djordjevic, *COVID-19 severity determinants inferred through ecological and epidemiological modelling*, One Health **13**, 100355 (2021).
67. Ognjen Milicevic, Igor Salom, Sofija Markovic, Andjela Rodic, Marko Tumbas, Dusan Zivic, Magdalena Djordjevic, Marko Djordjevic, *PM_{2.5} as a major predictor of COVID-19 basic reproduction number in the USA*, Environ. Res. **201**, 111526 (2021).
68. Marko Djordjevic, Igor Salom, Sofija Markovic, Andjela Rodic, Ognjen Milicevic, Magdalena Djordjevic, *Inferring the main drivers of SARS-CoV-2 transmissibility*, Geohealth **5**, e2021GH000432 (2021).
69. Magdalena Djordjevic, Marko Djordjevic, Bojana Ilic, Stefan Stojku, Igor Salom, *Understanding Infection Progression under Strong Control Measures through Universal COVID-19 Growth Strategies*, Global Chall. (Adv. Sci. News Commun.) **5**, 2000101 (2021) (featured as journal's Cover page).
70. Igor Salom, Andjela Rodic, Ognjen Milicevic, Dusan Zivic, Magdalena Djordjevic, Marko Djordjevic, *Effects of demographic and weather parameters on COVID-19 basic reproduction number*, Front. Ecol. Evol., **8**, 617841 (2021).
71. Magdalena Djordjevic, Andjela Rodic, Igor Salom, Dusan Zivic, Ognjen Milicevic, Bojana Ilic, Marko Djordjevic, *A systems biology approach to COVID-19 progression in population*, Adv. Protein Chem. Struct. Biol. **127**, 291 (2021).
72. Ognjen Milicevic, Jelena Repac, Bojan Bozic, Magdalena Djordjevic and Marko Djordjevic M, A Simple Criterion for Inferring CRISPR Array Direction. Front. Microbiol. 10, 2054 (2019).
73. Stefan Graovac, Andjela Rodic, Magdalena Djordjevic, Konstantin Severinov, Marko Djordjevic, *Effects of Population Dynamics on Establishment of a*

Restriction-Modification System in a Bacterial Host, Molecules **24**, E198 (2019).

- 74.Jelena Guzina, Weihua Chen, Tamara Stankovic, Magdalena Djordjevic, Evgeny Zdobnov, Marko Djordjevic, *In silico Analysis Suggests Common Appearance of scaRNAs in Type II Systems and Their Association With Bacterial Virulence*, Front. Genetics **9**,474 (2018).
- 75.Marko Djordjevic, Magdalena Djordjevic and Evgeny Zdobnov, *Scoring Targets of Transcription in Bacteria Rather than Focusing on Individual Binding Sites*, Front. Microbiol. **8**, 2314 (2017).
- 76.Andjela Rodic, Bojana Blagojevic, Konstantin Severinov, Magdalena Djordjevic and Marko Djordjevic, *Features of CRISPR-Cas Regulation Key to Highly Efficient and Temporally-Specific crRNA Production.*, Front. Microbiol. **8**, 2139 (2017).
- 77.Andjela Rodic, Bojana Blagojevic, Evgeny Zdobnov, Magdalena Djordjevic and Marko Djordjevic, *Understanding key features of bacterial restriction-modification systems through quantitative modeling*, BMC Syst. Biol. **11**:377 (2017).
- 78.Marko Djordjevic and Magdalena Djordjevic, *A simple biosynthetic pathway for large product generation from small substrate amounts*, Phys. Biol. **9**, 056004 (2012).
- 79.Marko Djordjevic, Magdalena Djordjevic and Konstantin Severinov, *CRISPR transcript processing: a mechanism for generating a large number of small interfering RNAs*, Biol. Direct **7**, 24 (2012).