

PUBLIKACJE

1. **T. Dobrowolski, A. Jarmoliński**
„Is there a relationship between curvature and inductance in the Josephson junction?”
Results in Physics 8, 48 (2018).
2. **T. Dobrowolski, A. Jarmoliński**
„Perturbation scheme for fluxon in curved Josephson junction.”
Physical Review E 96, 012214 (2017).
3. **A. Jarmoliński, T. Dobrowolski**
"The role of magnetic fields for curvature effects in Josephson junction."
Physica B, 514, 24 (2017).
4. **T. Dobrowolski**
"Kink profile in a curved space."
Acta Physica Polonica B, 46, 1457 (2015).
5. **T. Dobrowolski**
„The Fluxion in a Curved Josephson Junction.”
Journal of Geometry and Symmetry in Physics 34, 13 (2014) .
6. **T. Dobrowolski**
„Possible curvature effects in Josephson Junction.”
The European Physical Journal B, 86, 346 (2013).
7. **T. Dobrowolski**
„Curved Josephson Junction.”
Annals of Physics 327, 1336 (2012).
8. **T. Dobrowolski**
„The dynamics of the kink in curved large area Josephson Junction.”
Discrete and Continuous Dynamical Systems S 4, 1095 (2011).
9. **T. Dobrowolski**
„Geometry of vortices and domain walls.”
Journal of Geometry and Symmetry in Physics 22, 1 (2011).

10. **T. Dobrowolski**
 „An influence of the curvature on kink creation in the long Josephson junction.”
Canadian Journal of Physics 88, 627 (2010).
11. **T. Dobrowolski**
 „The studies on the motion of the sine-Gordon kink on a curved surface.”
Annalen der Physik 522, 574 (2010).
12. **T. Dobrowolski**
 „Construction of curved global vortex. ”
Annals of Physics 324, 2473 (2009).
13. **T. Dobrowolski**
 „Kink properties on curved manifold.”
Physics Letters A 373, 3867 (2009).
14. **T. Dobrowolski**
 „The kink motion in a curved Josephson junction.”
Physical Review E 79, 046601 (2009).
15. **T. Dobrowolski**
 „An influence of the curvature on the kink dynamics in the spherical Josephson junction. ”
Archives of Materials Science and Engineering 39, 116 (2009).
16. **T. Dobrowolski**
 „Construction of curved domain walls.”
Physical Review E 77, 056608 (2008).
17. **T. Dobrowolski, P. Tatrocki,**
 „ Evolution of kink network in inhomogenous systems.”
Journal of Nonlinear Mathematical Physics, 15, 134 (2008).
18. **T. Dobrowolski, P. Tatrocki,**
 „A numerical test of the collective coordinate method.”
Physics Letters A 372, 2834 (2008).
19. **T. Dobrowolski**
 „Precise tuning of the kink width in the long Josephson junction.”
Archives of Materials Science and Engineering 33, 107 (2008).
20. **P. Tatrocki, T. Dobrowolski**
 “Defect production behind the shock wave front of an inhomogeneous quench.”
Physical Review E 69 016209 (2004).
21. **T. Dobrowolski**
 “Creation of strings in the early Universe.”
Classical and Quantum Gravity 19, 3153 (2002).

22. **T. Dobrowolski**
 "Production of vortices in the dual Ginzburg-Landau theory."
Journal of Physics A **35**, 10739 (2002).
23. **T. Dobrowolski**
 "Kink production in the presence of impurities."
Physical Review **E 65**, 036136 (2002).
24. **T. Dobrowolski**
 "Kink production in the presence of random distributed impurities."
Physical Review **E 65**, 046133 (2002) .
25. **T. Dobrowolski**
 "Kinks of arbitrary width."
Physical Review **E66** 066112 (2002).
26. **T. Dobrowolski**
 "Hedgehog production in spatially correlated noise."
European Physical Journal **B29**, 269 (2002).
27. **T. Dobrowolski**
 "Kink production in the presence of spatio-temporal correlated noise."
Europhysics Letters **56**, 36 (2001).
28. **T. Dobrowolski**
 "Initial monopole density in an inflationary Universe."
Classical and Quantum Gravity **18**, 3019 (2001).
29. **T. Dobrowolski, J. Szczęśny**
 "Higgs mass as a signature of chaos in YMH system."
Annalen der Physik, **9**, 571 (2000) .
30. **J. Szczęśny, T. Dobrowolski**
 "Geodesic deviation equation approach to chaos."
Annals of Physics **277**, 161 (1999).
31. **J. Szczęśny, T. Dobrowolski**
 "Chronostructures of Special Relativity Theory."
General Relativity and Gravitation **30**, 487 (1999).
32. **T. Dobrowolski**
 "Excitations of vortices in Abelian Higgs model."
Journal of Physics A **30**, 1191 (1997).
33. **T. Dobrowolski**
 "On curved vortex solutions in Abelian Higgs model."
Journal of Mathematical Physics **36**, 1054 (1995).
34. **T. Dobrowolski**
 "Applications of membranes in Abelian Higgs model."
Physical Review **D50**, 6503 (1994) .

INNE PUBLIKACJE (proceedings, preprints)

35. **T. Dobrowolski**
"Curvature Effects in 1-D and 2-D Josephson Junctions."
Geom. Integrability & Quantization 17 (2016) 182-195.
Proceedings of the conference „Geometry, Integrability and Quantization“
(Varna), ISSN 1314-3247 (2015) , doi:10.7546/giq-17-2016-182-195
36. **T. Dobrowolski and P. Koc**
"Construction of the Shell in Nonsymmetric Gravity."
Geom. Integrability & Quantization 16 (2015) 178-187.
Proceedings of the conference „Geometry, Integrability and Quantization“
(Varna), ISSN 1314-3247 (2015), doi:10.7546/giq-16-2015-178-187.
37. **T. Dobrowolski**
„The Fluxion in a Curved Josephson Junction.”
Proceedings of the conference „Geometry, Integrability and Quantization“
(Varna), ISSN 1314-3247 (2014) .
38. **T. Dobrowolski**
„Geometry of minimally deformed vortices and domain walls.”
Proceedings of the conference „Geometry, Integrability and Quantization“
(Varna), ISSN 1314-3247 (2011) .
39. **T.Dobrowolski**
"An influence of impurities on production of kinks."
Proceedings of the workshop „Nonlinear Physics: Theory and
Experiment. II “ (Lecce), World Scientific Pub. Company, (2003) .
40. **T.Dobrowolski**
"Geodesic deviation equation in perception of the sensitive dependence on
initial conditions."
Proceedings of the workshop „Nonlinearity Integrability and all that:
Twenty years after needs 79” (Lecce), World Scientific Pub. Company,
101 (2000) .
41. **T.Dobrowolski, P.Koc**
"On the collapse of shell in nonsymmetric gravity."
Preprint – TPJU – 2/96 (1996).
42. **T.Dobrowolski**
"Membrane method in action."
Preprint – TPJU – 28/94 (1994) .
43. **T.Dobrowolski ,**
„On curved vortex solutions in the Abelian Higgs model.”
Preprint – TPJU – 6/93 (1993).

44. **T. Dobrowolski** , „Applications of membranes in Abelian Higgs model”
Preprint – TPJU – 27/93 (1993).
45. **T. Dobrowolski**
“Production of kinks in an inhomogenous medium”
cond-mat/0307522 (2003).
46. **T. Dobrowolski** ”
Produkcja defektów topologicznych w przemianach fazowych drugiego rodzaju.”
Raport IFJ - Nr 1904/PS (2002).
or
„Topological defects in the second-class phase transformations”
CERN Dokument Server: Raport INP-1904-PS
47. **T. Dobrowolski**
The dynamics of the fluxion in curved Josephson junction. **Abstract "Applied Mathematics, Modeling and Computational Science 2013."**

POZYCJE POPULARYZUJĄCE FIZYKĘ

48. **Współautor**
„FIZYKA – encyklopedia szkolna”
ISBN 83-7435-124-1
Wydawnictwo – Zielona Sowa, 2006.
49. **T. Dobrowolski**
Komentarz dotyczący nagrody Nobla dla Y. Namu, T. Maskawy oraz M. Kobayasi
Dziennik Polski, 8 X 2008.
50. **Współautor (rozdział "Instytut Fizyki")**
Informator z okazji 70-tego Jubileuszu UP,
strony 228-235 (2016).
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