

## Wykaz publikacji pracowników Wydziału Matematyki i Informatyki

### w dyscyplinie MATEMATYKA za rok 2020

1. **Bocheński M., Tralle A.**, *On the Hirzebruch-Kobayashi-Ono proportionality principle and the non-existence of compact solvable Clifford-Klein forms of certain homogeneous spaces*, Forum Mathematicum 2020, 32 (2), s. 471-477, DOI: 10.1515/forum-2017-0144 (100 pkt)
2. **Bocheński M., Tralle A.**, *On locally homogeneous pseudo-Riemannian compact Einstein manifolds*, Journal of Geometry and Physics 2020, 155, s. 1-17, numer artykułu: 103778, DOI: 10.1016/j.geomphys.2020.103778 (70 pkt)
3. **Bocheński M., Jastrzębski P., Tralle A.**, *Non-existence of standard compact Clifford-Klein forms of homogeneous spaces of exceptional Lie groups*, Mathematics of Computation 2020, 89, s. 1487-1499, DOI: 10.1090/mcom/3493 (140 pkt)
4. **Bocheński M., Tralle A.**, *Erratum to On Solvable Clifford-Klein Forms*, Proceedings of the American Mathematical Society 2020, 148 (6), s. 2743-2744, DOI: 10.1090/proc/14847 (100 pkt)
5. Bajger P., **Bodzioch M.**, Foryś U., *Numerical optimisation of chemotherapy dosage under antiangiogenic treatment in the presence of drug resistance*, Mathematical Methods in the Applied Sciences, 2020 (43), s. 10671-10689, DOI: 10.1002/mma.6958 (100 pkt)
6. **Chyzykhov I.**, *Asymptotic behaviour of  $p$ TH means of analytic and subharmonic functions in the Unit disc and angular distribution of zeros*, Israel Journal of Mathematics 2020, 235 (1), s. 1-27, DOI: 10.1007/s11856-020-1996-x (100 pkt)
7. **Cudna K., Kwon Oh S., Lecko A., Śmiarowska B.**, *The second and third-order hermitian toeplitz determinants for starlike and convex functions of order  $\chi$* , Boletín de la Sociedad Matemática Mexicana 2020, 26 (2), s. 361-375, DOI: 10.1007/s40590-019-00271-1 (70 pkt)
8. **Denisiuk A.**, *On range condition of the tensor x-ray transform in  $R^n$* , Inverse Problems and Imaging, 2020 (14), No. 3, 423-435, DOI: 10.3934/ipi.2020020 (70 pkt)
9. **Doliwa A., Kashaev R.**, *Non-commutative birational maps satisfying Zamolodchikov equation, and Desargues lattices*, Journal of Mathematical Physics 2020, 61 (9), s. 1-24, numer artykułu: 092704, DOI: 10.1063/5.0016474 (70 pkt)
10. **Doliwa A.**, *Non-commutative double-sided continued fractions*, Journal of Physics A - Mathematical and Theoretical 2020, 53 (36), numer artykułu: 364001, DOI: 10.1088/1751-8121/aba29c (70 pkt)
11. **Doliwa A., Noumi M.**, *The Coxeter relations and KPmap for non-commuting symbols*, Letters in Mathematical Physics 2020, (110), s. 2743-2762, DOI: 10.1007/s11005-020-01317-6 (100 pkt)
12. **Doliwa A., Kosiorek J.**, *Quadrangular Sets in Projective Line and in Moebius Space, and Geometric Interpretation of the Non-commutative Discrete Schwarzian Kadomtsev-Petviashvili Equation*, (w:) *Asymptotic, Algebraic and Geometric Aspects of Integrable Systems*, pod red. Frank Nijhoff Yang ShiDa-jun Zhang, 2020, s. 1-15, Springer Proceedings in Mathematics & Statistics 2194-1009 vol. 338, DOI: 10.1007/978-3-030-57000-2\_1 (20 pkt)
13. **Golasiński M., de Melo T., dos Santos E. L.**, *Homotopies of maps of suspended real and complex projective spaces and their cohomotopy groups*, Topology and its Applications 2020, s. 1-19, numer artykułu: 107553, DOI: 10.1016/j.topol.2020.107553 (70 pkt)
14. **Golasiński M., Goncalves D. L., Wong P.**, *On exponent and nilpotency of  $[\Omega(S^{r+1}), \Omega(KP^n)]$* , Topology and its Applications 2020, s. 1-28, numer artykułu: 107567, DOI: 10.1016/j.topol.2020.107567 (70 pkt)
15. **Jastrzębski P., Kowalczyk B., Kwon O. S., Lecko A., Jae Sim Y.**, *Hermitian Toeplitz determinants of the second and third-order for classes of close-to-star functions*, Revista de la Real Academia

- de Ciencias Exactas, Físicas y Naturales - Serie A: Matemáticas 114, 166 (2020), <https://doi.org/10.1007/s13398-020-00895-3> (100 pkt)
16. **Kolev M.**, *Mathematical Modeling of Autoimmune Diseases*, *Symmetry* 2020, 12 (9), numer artykułu: 1457, DOI: 10.3390/sym12091457 (70 pkt)
  17. **Kowalczyk B.**, Kwon Oh S., **Lecko A.**, Young J. S., **Śmiarowska B.**, *The third-order hermitian toeplitz determinant for classes of functions convex in one direction*, *Bulletin of the Malaysian Mathematical Sciences Society* 2020, 43 (4), s. 3143-3158, DOI: 10.1007/s40840-019-00859-w (70 pkt)
  18. Cho N. E., **Kowalczyk B.**, **Lecko A.**, **Śmiarowska B.**, *On the Fourth and Fifth Coefficients in the Carathéodory Class*, *Filomat* 2020, 34 (6), s. 2061-2072, DOI: 10.2298/FIL2006061C (40 pkt)
  19. Cho N. E., **Kowalczyk B.**, Kwon Oh S., **Lecko A.**, Sim Y. J., *On the third logarithmic coefficient in some subclasses of close-to-convex functions*, *Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas* 2020, 114 (52), s. 1-14, DOI: 10.1007/s13398-020-00786-7 (100 pkt)
  20. **Kwiatkowski M.**, **Pankov M.**, *The graph of 4-ary simplex codes of dimension 2*, *Finite Fields and Their Applications* 2020, 67, s. 1-27, numer artykułu: 101709, DOI: 10.1016/j.ffa.2020.101709 (100 pkt)
  21. Głąb S., **Marchwicki J.**, *Cardinal Functions of Purely Atomic Measures*, *Results in Mathematics* 2020 (75), numer artykułu: 141, DOI: 10.1007/s00025-020-01260-x (100 pkt)
  22. **Lecko A.**, **Śmiarowska B.**, *Subclasses of starlike functions related to Blaschke products*, *Hacettepe Journal of Mathematics & Statistics* 2020, 49 (1), s. 30-44, DOI: 10.15672/HJMS.2018.649 (40 pkt)
  23. **Matychyn I.**, *Pursuit Strategy of Motion Camouflage in Dynamic Games*, *Dynamic Games and Applications* 2020, 10 (1), s. 145-156, DOI: 10.1007/s13235-019-00316-0 (70 pkt)
  24. **Matychyn I.**, Onyshchenko V., *Solution of Linear Fractional Order Systems with Variable Coefficients*, *Fractional Calculus and Applied Analysis* 23.3 (2020), s. 753-63, DOI: 10.1515/fca-2020-0037 (100 pkt)
  25. Grigoryan A., Lin Y., **Muranov Y.**, Yau Shing-Tung, *Path complexes and their homologies*, *Journal of Mathematical Sciences* 2020, 248 (5), s. 564-599, DOI: 10.1007/s10958-020-04897-9 (40 pkt)
  26. **Muranov Y.**, **Szczepkowska A.**, *On Path Homology of Vertex Colored (Di)Graphs*, *Symmetry* 2020, 12 (6), s. 1-22, numer artykułu: 965, DOI: 10.3390/sym12060965 (70 pkt)
  27. Kycia R., **Niemczynowicz A.**, *An Explanation of the Landauer bound and its ineffectiveness with regard to multivalued logic*, *Technical Transactions*, 2020, 117(1), numer artykułu: 20200042, DOI: 10.37705/techtrans-e2020042 (20 pkt)
  28. **Pankov M.**, *Wigner-Type Theorems for Hilbert Grassmannians*, Cambridge University Press, 2020, pp.153, London Mathematical Society Lecture Note Series, DOI: 10.1017/9781108800327 (200 pkt)
  29. **Pankov M.**, Tyc A., *Z-Knotted Triangulations of Surfaces*, *Discrete and Computational Geometry* 2020, s. 1-23, DOI: 10.1007/s00454-020-00182-3 (100 pkt)
  30. **Shevchishin V.**, Smirnov G., *Elliptic diffeomorphisms of symplectic 4-manifolds*, *Journal of Symplectic Geometry* 18 (2020), no. 5, s. 1247–1283, DOI: 10.4310/JSG.2020.v18.n5.a3 (100 pkt)
  31. **Shevchishin V.**, Smirnov G., *Symplectic triangle inequality*, *Proceedings of the American Mathematical Society* 148 (2020), no. 4, 1389–1397, DOI: 10.1090/proc/14842 (100 pkt)
  32. Munoz V., Rojo J. A., **Tralle A.**, *Homology Smale-Barden Manifolds with K-contact but not Sasakian Structures*, *International Mathematics Research Notices* 2020, 21, s. 7397-7432, DOI: 10.1093/imrn/rny205 (140 pkt)

33. **Zbrzezny A.**, Szymoniak S. , Kurkowski M., *Practical Approach in Verification of Security Systems Using Satisfiability Modulo Theories*, Logic Journal of the IGPL 2020, DOI: 10.1093/jigpal/jzaa062 (100 pkt)