

**Paweł Dłotko**  
**Lista publikacji**  
z dnia 31 października 2013

**Publikacje w czasopismach**

1. **P. Dłotko**, R. Specogna, F. Trevisan, 2009, **Automatic generation of cuts on large-sized meshes for  $\Omega$  geometric eddy-current formulation**, Computer Methods in Applied Mechanics and Engineering, 198: 3765–3781.
2. **P. Dłotko**, R. Specogna, F. Trevisan, 2010, **Voltage and current sources for massive conductors suitable with the  $\chi$  Geometric Formulation**, IEEE Transactions on Magnetics, 46(8): 3069-3072.
3. **P. Dłotko**, R. Specogna, 2010, **Efficient cohomology computation for electromagnetic modeling**, CMES: Computer Modeling in Engineering & Sciences, 60(3): 247-278.
4. **P. Dłotko**, R. Specogna, 2010, **Critical analysis of spanning tree techniques**, SIAM J. Numer. Anal., 48(4): 1601-1624.
5. **P. Dłotko**, T. Kaczynski, M. Mrozek, Th. Wanner, 2011, **Coreduction Homology Algorithm for Regular CW-Complexes**, Discrete & Computational Geometry, 46(2): 361-388.
6. **P. Dłotko**, R. Specogna, 2011, **Efficient generalized source field computation for h-oriented magnetostatic formulations**, European Physical Journal Applied Physics, 53(2).
7. **P. Dłotko**, W. G. Kropatsch, H. Wagner, 2011, **Characterizing Obstacle-Avoiding Paths Using Cohomology Theory**, Lecture Notes in Computer Science, 6854: 310-317.
8. **P. Dłotko**, M. Juda, M. Mrozek, and R. Ghrist, 2012, **Distributed computation of coverage in sensor networks by homological methods**, Applicable Algebra in Engineering, Communication and Computing, Special Issue on Computer Algebra in Algebraic Topology and its Applications, 23(1):29-58.
9. **P. Dłotko**, 2012, **A fast algorithm to compute cohomology group generators of orientable 2-manifolds**, Pattern Recognition Letters 33:1468-1476.
10. H. Wagner, **P. Dłotko**, and M. Mrozek, 2012, **Computational Topology in Text Mining**, Computational Topology in Image Context, Lecture Notes in Computer Science, 7309:68 - 79.
11. P. Brendel, **P. Dłotko**, M. Mrozek, N. Żelazna, 2012, **Homology Computations via Acyclic Subspace**, Computational Topology in Image Context, Lecture Notes in Computer Science, 7309:117-127.
12. **P. Dłotko**, R. Specogna, 2013, **Cohomology in electromagnetic modeling**, Communications in Computational Physics (CiCP), 14(1):48-76.
13. **P. Dłotko**, R. Specogna, 2013, **A novel technique for cohomology computations in engineering practice**, Computer Methods in Applied Mechanics and Engineering, 253:530-542.
14. **P. Dłotko**, R. Specogna, 2013, **Physics inspired algorithms for (co)homology computations of three-dimensional combinatorial manifolds with boundary**, Computer Physics Communications, 184(10):2257-2266.
15. G. S. Cochran, Th. Wanner, **Paweł Dłotko**, 2013, **A randomized subdivision algorithm for determining the topology of nodal sets**, SIAM Journal on Scientific Computing, 35(5):1034–B1054.
16. **P. Dłotko**, H. Wagner, 2013, **Simplification of complexes for persistent homology computations**, Homotopy, Homology and Applications, przyjęte do druku.