

Curriculum vitae

Personal data:

Name, degree: dr Ewa Danuta Kozłowska-Walania

Date and place of birth: 12 Jan 1982, Bytom.

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Education:

2005-2008: **Ph. D. studies** in Mathematics, Gdańsk University, Faculty of Mathematics, Physics and Informatics; thesis title: *Ovals of symmetries of Riemann surfaces*, supervisor: prof. G. Gromadzki, referees: prof. W. Rosicki, prof. Cz. Bagiński; the thesis was awarded by the Council of the MFiI Faculty at UG.

2000-2005: **Master studies** in Theoretical Mathematics, Gdańsk University, supervisor: prof. G. Gromadzki.

Employment:

Assistant Professor, Mathematics Centre, PG, since October 2022.

Assistant Professor, Department of Algebra, Institute of Mathematics, UG, since October 2008.

Assistant Professor, Mathematical Institute, Polish Academy of Sciences (one year postdoctoral stay, 01.10.2009-30.09.2010).

Awards and achievements:

- Individual 3rd Degree Prize of Rector of the Gdańsk University of Technology for didactic achievements, Gdańsk 2023.
- Individual 2nd Degree Prize of Rector of the University of Gdańsk for exceptional scientific achievements, Gdańsk 2021.
- Co-organizing the conference *Workshop on low dimensional conformal structures and their groups* Gdańsk, 27-29 VI 2012.
- Laureate of the conference scholarship (2010) and (twice - 2009, 2010) scholarship START of the Foundation for Polish Science;
- Scholarship of the Foundation for Development of the University of Gdańsk, 2009
- Individual 3rd Degree Prize of Rector of the University of Gdańsk for Ph. D. thesis, Gdańsk 2009.
- The Prize of the Scientific Society of Gdańsk and the Mayor of Gdańsk for young researchers in mathematics, physics and chemistry for papers concerning the qualitative theory of symmetries of Riemann surfaces, 2008.
- The winner of the 9th Contest for the Procter and Gamble Prize for the best College Graduates, 2005

List of publications:

- (1) Real equations for o-extremal Riemann surfaces with abelian automorphism groups, to appear in *Glasnik Matematički* (with z P. Turbek)
- (2) On s-extremal Riemann surfaces of even genera, *Revista Matemática Complutense* 35 (2022), 159–178;
- (3) Fixed points on asymmetric Riemann surfaces, *Mediterranean Journal of Math.*, 17 (131), (2020) (with E. Tyszkowska);
- (4) Real equations for Riemann surfaces admitting an extremal configuration of three symmetries, *Houston Journal of Mathematics* 46 (3), (2020), 665-679;
- (5) Symmetric Riemann surfaces with no points fixed by orientation preserving automorphisms, *Mathematica Scandinavica* 126 (3), (2020), 479-492;
- (6) Extremal configurations of three or four symmetries on a Riemann surface, *Bulletin of the Korean Math. Soc.* 56 (1), (2019), 73-82;
- (7) The Groups Generated by Maximal Sets of Symmetries of Riemann Surfaces and Extremal Quantities of their Ovals, *Moscow Math. Journal* 18 (3), (2018), 421-436 (with G. Gromadzki);
- (8) On dimensions of the real nerve of the moduli space of Riemann surfaces of odd genus, *Rend. del Sem. matematico della Univ. di Padova.* 135 (2016), 91-109 (with G. Gromadzki);
- (9) On a certain family of asymmetric Riemann surfaces with the cyclic automorphism group, *Kodai Mathematical Journal* 39 (3), (2016), 510-520 (with E. Tyszkowska);
- (10) On asymmetric p-hyperelliptic Riemann surfaces, *Annales Academiæ Scientiarum Fennicæ Mathematica* 40 (2015), 669-682 (with E. Tyszkowska);
- (11) Non-commuting pairs of symmetries of Riemann surfaces, *Rocky Mountain Journal of Mathematics* 43 (3), (2013), 989-1014;
- (12) On the real nerve of the moduli space of complex algebraic curves of even genus, *Illinois Journal of Mathematics* 55 (2), (2011), 479–494 (with G. Gromadzki);
- (13) Non-central fixed point free symmetries of bisymmetric Riemann surfaces, *Osaka Journal of Math.* 48 (2011), 873-894;
- (14) On hyperellipticity degree of bisymmetric Riemann surfaces admitting a fixed point free symmetry, *Bulletin of the Institute of Mathematics, Academia Sinica (New Series)* 5 (4) (2010), 457-468;
- (15) On ovals of non-conjugate symmetries of Riemann surfaces, *International Journal of Mathematics* 20 (2009), 1-13 (with G. Gromadzki);
- (16) On fixed points of doubly symmetric Riemann surfaces, *Glasgow Math. Journal* 50 (2008) 371-378 (with G. Gromadzki).
- (17) On commutativity and ovals for a pair of symmetries of a Riemann surface, *Colloquium Mathematicum* 109 (2007) 61-69;

- (18) On p-hyperellipticity of doubly symmetric Riemann surfaces, *Publicacions Matemàtiques* 51 (2007), 291-307;

Grants:

- director of the grant **Properties of extremal Riemann surfaces** NCN MINIATURA 3 DEC-2019/03/X/ST1/01239;
- participation in team grants **Transformations of compact surfaces** (under supervision of prof. G. Gromadzki) N N201 366436 MNiSW and then NCN: NCN 2012/05/B/ST1/02171 and NCN UMO-2015/17/B/ST1/03235.
- participation in team grants BW (under supervision of prof. G. Gromadzki) nr 5100-5-0198-6, 5100-5-0289-7;

Conferences:

- *Spring Central Sectional Meeting of the AMS*, special session: Automorphisms of Riemann Surfaces and Related Topics III, Milwaukee, USA, IV 2024. Talk: Extremal Riemann surfaces, their properties and applications.
- *Conformal Geometry and Low Dimensional Manifolds*, Avila, Spain, VI 2022. Talk: Extremal Riemann surfaces and their equations.
- *Spring Eastern Virtual Sectional Meeting of the AMS*, special session: Automorphisms of Riemann surfaces, Subgroups of Mapping class groups and related topics, online, 19-20 III 2022. Talk: Some properties of extremal Riemann surfaces.
- *Seminario Cruz del Sur*, Universidad de la Frontera, Chile, VI 2021, Talk (online): Extremal Riemann surfaces and their properties.
- *Geometry at the Frontier*, inaugural online workshop of the Center of Excellence at the Universidad de la Frontera, online, Chile, X 2020.
- *Congreso Bienal de la Real Sociedad Matemática Española*, Santander, Spain, II 2019. Talk: Properties of extremal Riemann surfaces.
- *Loci of Riemann and Klein Surfaces with Automorphisms, Joint meeting of the Catalan, Spanish and Swedish Mathematical Societies*, Umea, Sweden, VI 2017. Talk: Equations, hyperellipticity degree and topological types for the Riemann surface having three symmetries with maximal total number of ovals.
- *Riemann and Klein Surfaces, Symmetries and Moduli Spaces*, Linköping, Sweden, VI 2013.
- *Symmetries of Discrete Objects, Conference and MAGMA Workshop*, Queenstown, New Zealand, II 2012.
- *Bled'11, 7th Slovenian International Conference on Graph Theory*, Bled, Slovenia, VI 2011. Talk: On the real nerve of the moduli space of Riemann surfaces - a combinatorial approach.
- *Czech-Slovak conference on graph theory*, Sachticky, Slovakia, VI 2011. Talk: On the real nerve of the moduli space of Riemann surfaces - a combinatorial approach.

- *2011 Zassenhaus Group Theory Conference*, Towson University, Towson USA, V 2011. Talk: On the real nerve of the moduli space of complex algebraic curves.
- *International Congress of Mathematicians* Hyderabad, India, VIII 2010. Talk (short communication): On the real nerve of the moduli space of complex algebraic curves.
- *Geometry, Topology and Dynamics of Character Varieties* Singapur, VIII 2010.
- *Symmetries in Graphs, Maps and Polytopes* Oaxaca, Mexico, VI 2010. Talk: On the real nerve of moduli space of complex algebraic curves.
- *Riemann surfaces and Dessins d'Enfants* Castro Urdiales, Spain, V 2010. Talk: Symmetry types of Riemann surfaces of low genera.
- *AMS 2009 Fall Eastern Section Meeting*, State College, USA, X 2009. Talk: Pairs of symmetries of Riemann surfaces.
- *25th and 1st British-Nordic Congress of Mathematicians*, Oslo, Norway VI 2009. Talk: On the real nerve of moduli spaces of Riemann surfaces.
- *Symmetries in Geometry and Topology*, Fribourg, Switzerland, VII 2008.
- *Conference on Algebraic and Geometric Topology*, Gdańsk, Poland, VI 2008.
- *Perspectives in Analysis, Geometry and Topology*, Sztokholm, Sweden, V 2008.
- *Geometry and Topology of Low Dimensional Manifolds*, Burgo de Osma, Spain, IX 2006. Talk: On doubly symmetric Riemann surfaces.

Languages: English, German, Swedish, Spanish.