

Wojciech Politarczyk

Curriculum vitae

Dept. of Mathematics Informatics and Mechanics
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Education

- 2011 – 2015 **Ph. D. studies**, *Adam Mickiewicz University in Poznań*, Participant of the Program “Środowiskowe Studia Doktoranckie z Nauk Matematycznych”.
Ph. D. Thesis: Khovanov homology of symmetric links
Advisor: Prof. Krzysztof Pawałowski
- 2006 – 2011 **M. Sc. in Mathematics**, *Adam Mickiewicz University*.
M. Sc. Thesis: 4-dimensional manifolds
Advisor: Prof. Krzysztof Pawałowski

Employment

- Since Oct 2019 **Assistant Professor**, *Warsaw University*.
- Oct 2018 – Sep 2019 **Postdoc**, *Warsaw University*, Research position funded by the Polish National Science Center grant no. 2016/22/E/ST1/00040.
- Oct 2016 – Sep 2018 **Postdoc**, *Warsaw University*, Research position funded by the Polish National Science Center grant no. 2016/20/S/ST1/00369.
- Oct 2015 – Sep 2019 **Assistant Professor**, *Adam Mickiewicz University in Poznań*.

Publications

Preprints

- Anthony Conway, Min Hoon Kim, and Wojciech Politarczyk. Non-slice linear combinations of iterated torus knots. arXiv:1910.01368, 2019.
- Maciej Borodzik, Anthony Conway, and Wojciech Politarczyk. Twisted Blanchfield pairings, twisted signatures and Casson-Gordon invariants. arXiv:1809.08791 [math.GT], 2018.
- Maciej Borodzik, Wojciech Politarczyk, and Marithania Silvero. Khovanov homotopy type and periodic links. arXiv:1807.08795 [math.GT], 2018.

Accepted for publication

- Maciej Borodzik and Wojciech Politarczyk, *Khovanov homology and periodic links*, 2017, arXiv:1704.07316v2, to appear in Indiana University Mathematical Journal.

- Wojciech Politarczyk, *Equivariant Khovanov homology of periodic links*, 2015, arXiv:1504.00376v2, to appear in Michigan Mathematical Journal.

Published Papers

- Wojciech Politarczyk. Equivariant Jones polynomials of periodic links. *J. Knot Theory Ramifications*, 26(3):1741007, 21, 2017.
- Marek Kaluba and Wojciech Politarczyk. Non-symplectic actions on complex projective spaces. *J. Symplectic Geom.*, 10(1):17–26, 2012.

Grants

Oct 2016 – Sep 2018 **Polish National Science Center grant FUGA5**, for funding a two-year Post-doc position at the University of Warsaw, grant number 2016/20/S/ST1/00369.

Awards

2011 First prize in the Józef Marcinkiewicz competition for the best student paper in mathematics, organized by the Polish Mathematical Association

2010/2011 Scholarship of the Ministry of Science and Higher Education

Conference Talks

Oct 2019 **Equivariant Khovanov homotopy type**, Group Action Forum Workshop, *Poznań, Poland*.

Jun 2019 **Cabling formula for twisted Blanchfield forms**, Knot concordance and low-dimensional manifolds , *Le Croisic, France*.

Dec 2018 **Cabling formula for twisted Blanchfield forms**, Twisted and quantum knot invariants, *Durham, UK*.

Jun 2018 **Twisted Blanchfield pairings and twisted signatures** Knots in Gdańsk II, Gdańsk University, *Gdańsk, Poland*.

Jun 2016 **Some remarks on Khovanov homology of periodic links**, Perspectives in topology and geometry of 4-manifolds, *Dubrovnik, Croatia*.

Sep 2015 **Equivariant Khovanov homology**, Stein Manifolds, Contact Structures and Knots, *Luminy, France*.

July 2015 **Equivariant Khovanov homology of periodic links**, Glances at Manifolds, *Kraków, Poland*.

May 2015 **On equivariant Khovanov homology**, Miniconference after the 17-th Andrzej Jankowski Memorial Lecture, *Gdańsk, Poland*.

Sep 2014 **On certain spectral sequence converging to Khovanov homology**, section Knot Theory, Joint Meeting of the Polish and German Mathematical Societies, *Poznań, Poland*.

Sep 2013 **4-manifolds with odd fundamental groups**, conference Knots, Manifolds and Group actions, *Słubice, Poland*.

Sep 2013 **4-manifolds with odd fundamental groups**, 5-th Polish Mathematical Forum, *Rzeszów, Poland*

Seminar Talks

- Feb 2019 Equivariant Khovanov homotopy type, *Durham University*
May 2018 Equivariant Khovanov homotopy type, *University of Zurich*
Nov 2017 Khovanov homology of periodic links, *University of Geneva*
Mar 2017 New periodicity criterion form Khovanov homology, *Warsaw University*
Jan 2017 Symmetries of knots and Khovanov homology, *University of Regensburg*
Feb 2014 4-manifolds with odd fundamental group, *University of Nantes*
Nov 2011 Nonsymplectic actions on complex projective spaces, *Warsaw University*

Shorter Research Visits

- Jul 2019 Research in pairs: **The slice-ribbon conjecture and non-slice algebraic knots** at CIRM Luminy.
Feb 2019 A one week research visit at Durham University. Host: Anthony Conway.
May 2018 A one week research visit at the University of Zurich. Host: Krzysztof Putyra.
Nov 2017 A one week research visit at the University of Geneva. Host: Anthony Conway.
Jan 2017 A one week research visit at the University of Regensburg. Host: Michał Marcinkowski.

Longer Research Visits

- Jan 2013 – Jun 2013 Research Visit in the Max Planck Institute of Mathematics in Bonn during the activity Semester on 4-manifolds
Oct 2011 – Feb 2012 Research Visit at the Warsaw University as a part of the Program “Środowiskowe Studia Doktoranckie z Nauk Matematycznych”

Conferences Co-organized

- Sep 2013 Knots, Manifolds and Group actions, *Słubice*

Teaching Experience

- Introduction to math. for chemistry students, UW, winter 2019/20
- Linear algebra for economy students, UW, winter 2019/20
- Introduction to knot theory, UW, spring 2019
- Linear algebra for economy students, UW, winter 2018/19
- Algebraic and geometric topology, UAM, spring 2016
- Tools of computer science, UAM, spring 2016
- Elements of topology and differential geometry, UAM, winter 2015/2016
- Introduction to computer science, UAM, winter 2015/2016
- Introduction to mathematics for chemistry students, UAM, winter 2015/2016
- Introduction to mathematics for geoinformatics students, winter 2013/14
- Introduction to mathematics for biology students, winter 2013/14