CIRRICULUM VITAE

Name: Grzegorz Kapustka

Education:

- 1986–1991 School OUCFA w Tizi-Ouzou in Algieria
- 1991–1994 School nr. 55 in Cracow
- 1994–1998 Highschool no. V im. A. Witkowskiego in Cracow
- 1998–2003 Student in the Mathematics Institute of the Jagiellonian University
- 2003–2007 Graduate student in the Mathematics Institute of the Jagiellonian University

Current Position: Associate Professor Jagiellonian University

Positions Held:

- 2004, February–June: Eager fellowship at the University of Warwick under the supervision of Miles Reid
- 2004, September–December: Marie–Curie fellowship at the University of Liverpool under the supervision of V. Nikulin

- 2007–2009 postdoc, Jagiellonian University
- 2009–2011 assistant professor, Jagiellonian University
- 2011–2012 postdoc, University of Zurich
- 2012–2016 assistant professor, Institute of Mathematics Polish Academy of Sciences
- 2012, March: visitor, University of Grenoble
- 2013, February: visitor, University of Zurich
- 2014, March: visitor, University of Zurich
- 2015 February: visitor, University of Stavanger
- 2016 February: visitor, University of Oslo
- 2013-2017 Assistant Professor at the Institute of Mathematics Polish Academy of Sciences
- 205-2017 postdoc at the University of Zürich

Talks at conferences:

- *Primitive contractions of Calabi–Yau threefolds*, closing workshop of the Marie–Curie program, Liverpool, 2006.
- *Construction of Calabi-Yau threefolds of Picard group of rank 1*, workshop "Calabi–Yau threefold and Mirror symmetry" Milan, February, 2011.
- *On the O'Grady conjecture*, a workshop on Hyperkahler manifolds, Banach Center, Warsaw, 2012.
- *On IHS fourfolds with* $b_2 = 23$, Moduli spaces of irreducible symplectic varieties, cubics and Enriques surfaces", Lille, March 24–28, 2014.
- *On IHS fourfolds with* $b_2 = 23$ "Fibrations on algebraic varieties and related topics " University of Milano, September, 2014.
- *On IHS fourfolds with* $b_2 = 23$ "Quaternion-Kähler manifolds and related structures in Riemannian and algebraic geometry" Poznań, September, 2014.
- *Twenty incident planes*, a workshop about a problem of O'Grady, University of Milano, March, 2015.

- *Twenty incident planes*, "Classical algebraic geometry and Syzygies" Banach Center Warsaw, April, 2015.
- *Twenty incident planes and hyper-Kähler manifolds* Projective Geometry: (Prof. Zak 65 birthday) Moscow September 2015
- *EPW cubes* "Hyper-KÄ¤hler Manifolds and Related Structures in Algebraic and Differential Geometry" Levico Terme, November 2015.
- *Hyperkahler manifolds and Kummer surfaces* Mediterranean Complex Projective Geometry in Carry-le-Rouet 24-27 may 2016.
- *Hyperkahler varieties and related topics*, 12-16 September 2022

Organisation of conferences:

- "The Ubiquity of Wronskians" Banach Center Oktober 2011
- "Hyperkä hler manifolds" Banach Center April 2012
- IMPANGA 15 *60 Pragacz* Bedlewo April 2015
- "Varieties with trivial canonical bundles" Closing conference Minipages June 2016
- "IMGANGA 20" Bedlewo 2021
- Septembers school of Algebraic geometry, september 2021
- Recent advances in Classical Algebraic Geometry, satelite ICM, Krakow 2022

Ph.D. Thesis: 2007, "Primitive contractions of Calabi–Yau threefolds", under the supervision of S. Cynk.

Research interests: Classical algebraic geometry, Hyperkähler manifolds, birational geometry of Calabi–Yau threefolds, Mirror symmetry.

Students:

- Pawel Wiklik *Hilbert scheme of points on Del Pezzo surfaces*,master thesis, Jagiellonian University, 2008.
- Łukasz Gołebiowski *Mirror symmetry of del Pezzo surfaces*, master thesis, Jagiellonian University 2013.
- Kacper Grzelakowski PHD student 2018-2022

- Tomasz Wawak PhD student

Awards:

- Laureate of the Mathematical Olympiads in Poland, (places III, I, II)
- 1997 - 2003 Minister of National Education scholarship
- 1997, Silver medalist of the International Mathematical Olympiad
- 1998, Third place at the contest for Young Researchers of the EU in Porto
- 2009, Honorable mention in The International Stefan Banach Prize for a Doctoral Dissertation
- 2010, START Scholarship Fundation for Polish Science

Family status: I am married, with four children.

List of publications

1. Gilberto Bini, Grzegorz Kapustka, Michal Kapustka, *Symmetric locally free resolutions and rationality problems,* Communications in Contemporary Mathematics (2021)
2. Grzegorz Kapustka, Alessandro Verra, *On Morin configurations of higher length*, International Mathematics Research Notices vol. Volume 2022, Issue 1 (2021), 727â€“772
3. Grzegorz Kapustka, Michal Kapustka, Riccardo Moschetti, *Equivalence of K3 surfaces from Verra threefolds*, Kyoto Journal of Mathematics vol. Volume 60, Number 4 (2020), 1209-1226
4. Joachim Jelisiejew, Grzegorz Kapustka, Michal Kapustka, *Smoothable zero dimensional schemes and special projections of algebraic varieties*, Mathematische Nachrichten vol. 292 (2019), 2018â€“ 2027
5. Chiara Camere, Grzegorz Kapustka, Michal Kapustka, Giovanni Mongardi, *Verra fourfolds, twisted sheaves and the last involutions*, International Mathematics Research Notices vol. 21 (2019), 6661-6710
6. S. Coughlan, Ł. Gołębiowski, G. Kapustka, M. Kapustka, *Calabi–Yau threefolds in codimension* 4, Electronic Research Announcements in Mathematical Sciences vol. 23 (2016), 52-68

7. A.Iliev, G.Kapustka, M. Kapustka, K., Ranestad, *Hyperkähler fourfolds and Kummer surfaces* arxiv, Proceedings of the London Mathematical Society vol. 115 (2017), 1276â€“1316
8. S. Dinew, G. Kapustka, M. Kapustka *Remarks on Mukai threefolds admitting* $\mathbb{C}^*$ *action* arxiv, Moscow Mathematical Journal vol. 17(1) (2017), 15-33
9. M.Donten-Bury, B. van Geemen, G. Kapustka, M.Kapustka, J. Wiśniewski, *Twenty incident planes*, to appear in Geometry & Topology
10. A.Iliev, G.Kapustka, M. Kapustka, K., Ranestad, *EPW cubes*, to appear in Journal für die reine und angewandte Mathematik
11. J.Buczyński, G.Kapustka, M.Kapustka, *Special lines on contact manifolds* Annales de l'Institut Fourier (2021)
12. G.Kapustka, *On IHS fourfolds with* $b_2 = 23$, Michigan J. Math. 65, (1) 2016
13. G.Kapustka, M.Kapustka, *Bilinkage in codimension* 3 *and canonical surfaces of degree* 18 *in* $\mathbb{P}^5$, to appear in Ann. Sc. Norm. Super. Pisa Cl. Sci.
14. G.Kapustka, M.Kapustka, *Tonoli Calabi–Yau threefolds revisited*, arxiv, submitted
15. G. Kapustka, M.Kapustka, *Calabi-Yau threefolds in* $\mathbb{P}^6$, to appear in Ann. Mat. Pura Appl
16. G.Kapustka, *Projections of del Pezzo surfaces and Calabi–Yau threefolds*, Adv. Geom. 2015; 15 (2):143-158.
17. G.Kapustka, *On irreducible symplectic 4-folds numerically equivalent to* $(K3)^{[2]}$, preprint arxiv
18. G.Kapustka, M.Kapustka, *A cascade of determinantal Calabi-Yau threefolds*, with appendix by P. Pragacz, Math. Nachr. 283 (2010), no. 12, 1795–1809
19. G.Kapustka, *Primitive contractions of Calabi–Yau threefolds II* J. Lond. Math. Soc. (2) 79 (2009), no. 1, 259-271
20. G.Kapustka, M.Kapustka, *Primitive contractions of Calabi-Yau threefolds I*, Commun. Algebra 37, No. 2, 482-502 (2009)
21. G.Kapustka, M.Kapustka, *Fiber products of elliptic surfaces with sec-*

tion and corresponding Kummer fibrations, Int. J. Math. 20, No. 4, 401-426 (2009)

22. G.Kapustka, M.Kapustka, *Equations of log del Pezzo surfaces of index* ≤ 2, Math. Z. 261, No. 1, 169-188 (2009)
23. G.Kapustka, M.Kapustka, *Modularity of some nonrigid Calabi-Yau threefold with bad reduction at 13*, Ann. Pol. Math. 90, No.1, 89-98 (2007)