HOW TO DRAW A DESSIN?

MICHAEL MUSTY

Abstract.

Contents

1.	Introduction	1
2.	Equivalent categories	1
3.	Existing catalogs	1
4.	Drawing techniques	1
5.	Degree ≤ 4	1
6.	Degree 5	2
7.	Degree 6	2
8.	Degree 7	2
9.	Degree 8	2
References		2
References		2

- 1. Introduction
- 2. Equivalent categories
- 2.1. Dessins.
- 2.2. Clean dessins.
- 2.3. Ribbon graphs.
- 3. Existing catalogs
- 4. Drawing techniques
 - 5. Degree ≤ 4

Date: September 17, 2019.

- 6. Degree 5
- 7. Degree 6
- 8. Degree 7
- 9. Degree 8

References

- N. M. Adrianov, N. Ya. Amburg, V. A. Drëmov, Yu. Yu. Kochetkov, E. M. Kreĭnes, Yu. A. Levitskaya, V. F. Nasretdinova, and G. B. Shabat, A catalogue of Belyĭ functions of dessins d'enfants with at most four edges, Fundam. Prikl. Mat. 13 (2007), no. 6, 35–112. MR 2476028
- N. M. Adrianov and A. K. Zvonkin, Weighted trees with primitive edge rotation groups, Fundam. Prikl. Mat. 18 (2013), no. 6, 5–50. MR 3431854
- 3. Jean Bétréma and Alexander Zvonkin, *Plane trees and Shabat polynomials*, Proceedings of the 5th Conference on Formal Power Series and Algebraic Combinatorics (Florence, 1993), vol. 153, 1996, pp. 47–58. MR 1394945
- Michael Klug, Michael Musty, Sam Schiavone, and John Voight, Numerical calculation of threepoint branched covers of the projective line, LMS J. Comput. Math. 17 (2014), no. 1, 379–430. MR 3356040
- Michael Musty, Sam Schiavone, Jeroen Sijsling, and John Voight, A database of Belyi maps, Proceedings of the Thirteenth Algorithmic Number Theory Symposium, Open Book Ser., vol. 2, Math. Sci. Publ., Berkeley, CA, 2019, pp. 375–392. MR 3952023
- J. Sijsling and J. Voight, On computing Belyi maps, Numéro consacré au trimestre "Méthodes arithmétiques et applications", automne 2013, Publ. Math. Besançon Algèbre Théorie Nr., vol. 2014/1, Presses Univ. Franche-Comté, Besançon, 2014, pp. 73–131. MR 3362631

 $ICERM\ Fall\ 2019$

 $Email\ address: {\tt michaelmusty@gmail.com}$