

Makiko Mase

## The list of academic papers

- Academic papers with referee

- [1] M. KOBAYASHI and M. MASE, Isomorphism among families of weighted  $K3$  hypersurfaces, Tokyo J. Math., vol.35, No.2, pp.461–467 (2012).
- [2] M. KOBAYASHI, M. MASE, K. UEDA, A note on exceptional unimodal singularities and  $K3$  surfaces, International Mathematics Research Notices 2013; 2013:1665-1690, March 28, 2013 (doi: 10.1093/imrn/rns098). Published online at <http://imrn.oxfordjournals.org/> on 13 March 2012.
- [3] Makiko MASE, Families of  $K3$  surfaces in smooth Fano 3-folds, Commentarii Mathematici Univ. St. Pauli, vol. 61, No.2, pp.103–114 (2012).
- [4] Makiko MASE, Families of  $K3$  surfaces in smooth Fano 3-folds with Picard number 2, Vietnam Journal of Mathematics, vol.42, No.3, pp.295–304 (2014).
- [5] M. MASE and K. Ueda, A note on bimodal singularities and mirror symmetry, Manuscripta Math., published online on 31 August 2014, vol.146, Issue 1–2, pp.153–177 (2015), DOI 10.1007/s00229-014-0693-7.
- [6] Makiko MASE, A mirror duality for families of  $K3$  surfaces associated to bimodular singularities, Manuscripta Math., published online on 26 September 2015, vol. 149, Issue 3–4, pp.389–404 (2016), DOI 10.1007/s00229-015-0788-9.
- [7] M.-J.BERTIN, A.GARBAGNATI, R.HORTSCH, O.LECACHEUX, M.MASE, C.SALGADO, and U.WHITCHER, Classifications of elliptic fibrations of a singular  $K3$  surface, in Women in Numbers Europe Research Directions in Number Theory, Association for Women in Mathematics Series vol. 2, M.-J. Bertin, A. Bucur, B. Feigon, L.Schneps eds, pp.17–50, Springer 2015.
- [8] Makiko MASE, Polytope duality for families of  $K3$  surfaces associated to transpose duality, Commentarii Math. St. Pauli., vol. 65, No.2, pp.131–139 (2016).

- [9] Makiko MASE, Lattice duality for families of  $K3$  surfaces associated to transpose duality, *Manuscripta Math.*, published online on online 10 April 2017, vol. 155, Issue 1–2, pp.61–76 (2018), DOI 10.1007/s00229-017-0936-5.
- [10] Makiko MASE, Families of  $K3$  surfaces and curves of  $(2, 3)$ -torus type, *Kodai Math. J.*, vol. 42, (3), pp.409-430 (October 2019), DOI: 10.2996/kmj/1572487224.
- [12] J. KOMEDA and M.MASE, Curves on weighted  $K3$  surfaces of degree two with symmetric Weierstrass semigroups, *Tsukuba J. Math.*, vol 43, (1), pp. 55-70 (2019).
- [13] Makiko MASE, Polytope duality for families of  $K3$  surfaces and coupling, *Bulletin of the Brazilian Mathematical Society, New Series*, vol. 52, pp, 499–536 (2021), published online on 24 June 2020, <https://doi.org/10.1007/s00574-020-00215-8>.
- [14] C. HERTLING and M.MASE, The integral monodromy of isolated quasihomogeneous singularities, *Algebra & Number Theory*, **16** (4), 955–1024 (2022). <https://doi.org/10.2140/ant.2022.16.955>.
- [15] Makiko MASE, Lattice duality for coupling pairs admitting polytope duality with trivial toric contribution, Published: 20 August 2021, *Beiträge zur Algebra und Geometrie/Contributions to Algebra and Geometry*, **63**, 533–559 (2022). <https://doi.org/10.1007/s13366-021-00592-1>
- [16] C. HERTLING and M.MASE, The integral monodromy of the cycle type singularities, *J. of Singularities*, **25**, 268–298 (2022). <https://doi.org/10.5427/jsing.2022.251>
- [17] C. Hertling and M. Mase, The combinatorics of weight systems and characteristic polynomials of isolated quasihomogeneous singularities, *J. Algebr. Comb.* (2022). Published: 09 May 2022. <https://doi.org/10.1007/s10801-022-01138-x>
- [18] M.MASE and U.WHITCHER, Mirror constructions for  $K3$  surfaces from bimodal singularities, In: Abdellatif, R., Karemaker, V., Smajlovic, L. (eds) *Women in Numbers Europe IV*. Association for Women in Mathematics Series,

vol 32. Springer, Cham., pp. 323-352 (2024). [https://doi.org/10.1007/978-3-031-52163-8\\_11](https://doi.org/10.1007/978-3-031-52163-8_11).

- [19] J.KOMEDA and M.MASE, Pointed curves on  $K3$  surfaces which are double covers of rational elliptic surfaces, Tsukuba J. Math., vol 47, (1), pp. 65–82 (2023).
- [20] Makiko MASE, A note on simple  $K3$  singularities and families of weighted  $K3$  surfaces, Rend. Circ. Mat. Palermo, II. Ser (2023). <https://doi.org/10.1007/s12215-023-00894-4>.
- [21] J.KOMEDA and M.MASE, Non- $K3$  Weierstrass numerical semigroups, Semigroup Forum **108**, Springer, pp.145–164 (2024).
- [22] Makiko MASE, Lattice duality for families of  $K3$  surfaces and coupling, to appear in (Advanced Studies in Pure Mathematics)ASPM89 “Deepening and Evolution of Applied Singularity Theory”

- Academic papers preprint

- [1] Makiko MASE, Polytope duality for families of  $K3$  surfaces associated to singularities  $Q16$  and  $S16$ , arXiv:1910.10600, 2019. .
- [3] Makiko MASE, Primitive closure of the lattices associated to symplectic automorphisms on  $K3$  surfaces, in preparation.

- Academic papers without referee

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- [2] Makiko Mase, “On isomorphism among the families of weighted  $K3$  hypersurfaces”, electrical report of Algebraic Geometry Mini Workshop 2010 <http://www.rimath.saitama-u.ac.jp/lab.jp/fsakai/proc2010.html>

- [3] Makiko Mase, “Isomorphism Among the Families of Weighted  $K3$  Hypersurfaces”, ICM2010 Abstracts Short Communications Posters, pp.110–111.
- [4] Makiko Mase, “Isomorphism among the 95 families of weighted  $K3$  hypersurfaces”, report of Kinosaki Algebraic Geometry Symposium 2010, p.123.
- [5] Makiko Mase, “Families of  $K3$  surfaces in the smooth Fano 3-folds”, report of Kinosaki Algebraic Geometry Symposium 2011, p.157.
- [6] Makiko Mase, “Families of  $K3$  surfaces in the smooth Fano 3-folds”, report of Geometry of Projective Varieties and related topics 2011, pp.115–128.
- [7] Makiko Mase, “Families of  $K3$  surfaces in the smooth Fano 3-folds”, report of The 9th Symposium on Algebraic Curves 2011, pp.23–28.
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- [9] Makiko Mase, “Automorphism of Toric Gorenstein  $K3$  hypersurfaces in Fano 3-folds”, report of The 10th Symposium on Algebraic Curves 2012, pp.33–42.
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- [11] Makiko Mase, “Lecture Note for Introduction to Geometry of  $K3$  surfaces”, Osaka City University Advanced Mathematical Institute Preprint Series, February 17, 2014. <http://sci.osaka-cu.ac.jp/math/OCAMI/preprint/index13.html>
- [12] Makiko Mase, “Dualities among families of  $K3$  surfaces associated to bimodular singularities”, report of Kinosaki Algebraic Geometry Symposium 2014, pp. 31–41.
- [13] Makiko Mase, “The lattice mirror symmetry for families of  $K3$  surfaces associated to bimodular singularities”, report of The 13th Symposium on Algebraic Curves 2015, pp.91–96.
- [14] Makiko Mase, “On families of  $K3$  surfaces” (Japanese), report of The 9th Meeting of Women in Numbers Japan, pp.123–130, (2016).

- [15] Makiko Mase, “On dualities among families of  $K3$  surfaces” (Japanese), report of The 9th Meeting of Women in Numbers Japan (2017).
- [16] Makiko Mase, “Families of  $K3$  surfaces and curves of  $(2, 3)$ -torus type” (Japanese), report of The 11th Meeting of Women in Numbers Japan (2018).
- [17] Makiko Mase, “Numerical semigroups and curves on  $K3$  surfaces”, report of The 19th Symposium on Algebraic Curves 2021.
- [18] Makiko Mase, “On some lattice structures associated to simple  $K3$  singularities” (Japanese), report of The 15th Meeting of Women in Numbers Japan (2022).
- [19] Makiko Mase, “On dualities related to coupling”, report of Kinosaki Algebraic Geometry Symposium 2023.
- [20] Makiko Mase, “Lattices and symplectic actions on algebraic  $K3$  surfaces”, report of 71st Topology symposium, available at <https://www.mathsoc.jp/topology/topsymp/2024/ts2024all.pdf>