

Achievement (発表論文：以下”○”が主要論文)

欧文雑誌に掲載または掲載予定査読あり欧文論文

- 1-1.** (Refereed) N. Kitazawa, *Fold maps with singular value sets of concentric spheres*, Hokkaido Mathematical Journal Vol.43, No.3 (2014), 327–359, DOI: 10.14492/hokmj/1416837569, <https://projecteuclid.org/journals/hokkaido-mathematical-journal/volume-43/issue-3/Fold-maps-with-singular-value-sets-of-concentric-spheres/10.14492/hokmj/1416837569.full>.
- 1-2.** (Refereed) N. Kitazawa, *Constructions of round fold maps on smooth bundles*, Tokyo J. of Math. Volume 37, Number 2 (2014), 385–403, DOI: 10.3836/tjm/1422452799, <https://projecteuclid.org/journals/tokyo-journal-of-mathematics/>.
- 1-3.** (Refereed) N. Kitazawa, *On Reeb graphs induced from smooth functions on 3-dimensional closed manifolds with finitely many singular values*, Topological Methods in Nonlinear Analysis Vol. 59 No. 2B (2022), 897–912, <https://doi.org/10.12775/TMNA.2021.044>, arXiv:1902:8841.
- 1-4.** (Refereed) N. Kitazawa, *On Reeb graphs induced from smooth functions on closed or open surfaces*, Methods of Functional Analysis and Topology Vol. 28 No. 2 (2022), 127–143, doi.org/10.31392/MFAT-npu26.2.2022.05, arXiv:1908.04340.
- 1-5.** (Refereed) N. Kitazawa, *Real algebraic functions on closed manifolds whose Reeb graphs are given graphs*, Methods of Functional Analysis and Topology Vol. 28 No. 4 (2022), 302–308, arXiv:2302.02339, 2023.
- 1-6.** (Refereed) N. Kitazawa and O. Saeki, *Round fold maps of n -dimensional manifolds into R^{n-1}* , J. of Singularities, Vol. 26 (2023), 1–12, <http://www.journalofsing.org/volume26/article1.html>, DOI: 10.5427/jsing.2023.26a, arXiv:2111.15103.
- 1-7.** (Refereed) N. Kitazawa and O. Saeki, *Round fold maps on 3-manifolds*, accepted for publication in Algebraic & Geometric Topology 23 (2023), 3745–3762, arXiv:2105.00974.
- 1-8.** (Refereed) N. Kitazawa, *On Reeb graphs induced from smooth functions on 3-dimensional closed manifolds which may not be orientable*, Methods of Functional Analysis and Topology Vol. 29 No. 1 (2023), 57–72, 2024.
- 1-9.** (Refereed) N. Kitazawa, *Constructing Morse functions with given Reeb graphs and level sets*, accepted for publication in Topological Methods in Nonlinear Analysis, arXiv:2108.06913 (, where the title has been changed from the title there), 2025.

前述以外の査読有論文や査読有の”プロシーディングの原稿”等

- 2-1.** (Refereed) N. Kitazawa, *On round fold maps (in Japanese)*, RIMS Kôkyûroku Bessatsu B38 (2013), 45–59, <http://hdl.handle.net/2433/207808>.
- 2-2.** (Reviewed) N. Kitazawa, *Explicit construction of explicit real algebraic functions and real algebraic manifolds via Reeb graphs*, Algebraic and geometric methods of analysis 2023 “The book of abstracts”, 49–51, this is the abstract book of the conference “Algebraic and geometric methods of analysis 2023” (<https://www.imath.kiev.ua/~topology/conf/agma2023/>) and each abstract is reviewed,

<https://imath.kiev.ua/~topology/conf/agma2023/contents/abstracts/texts/kitazawa/kitazawa.pdf>.

2-3. (Reviewed) N. Kitazawa, *On explicit reconstruction of real algebraic maps locally like moment maps*, Algebraic and geometric methods of analysis 2024 “The book of abstracts” , 60–62, this is the abstract book of the conference “Algebraic and geometric methods of analysis 2024” (<https://www.imath.kiev.ua/~topology/conf/agma2024/>) and each article is reviewed.

2-4. (Reviewed) N. Kitazawa, *Reconstructing Morse functions with prescribed preimages of single points*, Algebraic and geometric methods of analysis 2024 “The book of abstracts” , 60–62, this is the abstract book of the conference “Algebraic and geometric methods of analysis 2025” (<https://www.imath.kiev.ua/~topology/conf/agma2025/agma2025-theses.pdf>) and each article is reviewed (<https://www.imath.kiev.ua/~topology/conf/agma2025/index.html#>).

学位論文

3 N. Kitazawa, *On manifolds admitting fold maps with singular value sets of concentric spheres*, Doctoral Dissertation, Tokyo Institute of Technology (2014).

プレプリント(主要なもの)

4-1. N. Kitazawa, *Closed manifolds admitting no special generic maps whose codimensions are negative and their cohomology rings*, submitted to a refereed journal, arXiv:2008.04226v5.

4-2. N. Kitazawa, *Notes on explicit special generic maps into Euclidean spaces whose dimensions are greater than 4*, a revised version is submitted based on positive comments (major revision) by referees and editors after the first submission to a refereed journal, arXiv:2010.10078.

4-3. N. Kitazawa, *Restrictions on special generic maps on 6-dimensional or higher dimensional closed and simply-connected manifolds*, arXiv:2201.09437.

4-4. N. Kitazawa, *The 3-dimensional complex projective space admits no special generic maps*, arXiv:2202.00883.

4-5. N. Kitazawa, *Characterizing certain classes of 6-dimensional closed and simply-connected manifolds via special generic maps*, arXiv:2205.04048.

4-6. N. Kitazawa, *On the non-existence of special generic maps on complex projective spaces*, arXiv:2206.11500.

4-7. N. Kitazawa, *Reconstructing real algebraic maps locally like moment-maps with prescribed images and compositions with the canonical projections to the 1-dimensional real affine space*, the title has changed from previous versions, submitted to a refereed journal, arXiv:2303.10723, 2024.

4-8. N. Kitazawa, *Some remark on real algebraic maps which are topologically special generic maps and generalize the canonical projections of the unit spheres*, submitted to a refereed journal, arXiv:2312.10646, 2024.

4-9. N. Kitazawa, *On a classification of Morse functions on 3-dimensional manifolds represented as connected sums of manifolds of Heegaard genus one*, arXiv:2411.15943, 2024.

4-10. N. Kitazawa, *On reconstructing Morse functions with prescribed preimages on 3-dimensional manifolds and a necessary and sufficient condition for the*

reconstruction, arXiv:2412.20626, 2026.

4-11. N. Kitazawa, *On reconstructing Morse-Bott functions with prescribed preimages on 3-dimensional manifolds and conditions for the reconstruction*, after the submission of an earlier version of the previous preprint "4-10" to a refereed journal, the author hit on a new and essential idea on improving some result from the preprint in the case of a certain class of Morse-Bott functions, explicitly, arXiv:2501.05992, 2025.

4-12. N. Kitazawa, *Moment-like maps and real algebraic functions with prescribed preimages*, arXiv:2506.17791, 2025.

4-13. N. Kitazawa, *A note on Reeb spaces of some explicit real analytic functions*, submitted to a refereed journal, arXiv:2601.11648, 2026.

○**4-14.** N. Kitazawa, *A note on cohomological structures of special generic maps*, a revised version is submitted based on a positive comment by a referee (major revision) after the third submission to a refereed journal, 2025.