

発表論文 (ACHIEVEMENT) (北澤 直樹: ”○”が主要論文 5 件)

NAOKI KITAZAWA

査読有論文

- 1.1.** 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.** 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/volume-37/issue-2/Constructions-of-Round-Fold-Maps-on-Smooth-Bundles/10.3836/tjm/1422452799.full>, arXiv:1305.1708.
- 1.3.** N. Kitazawa, *On Reeb graphs induced from smooth functions on 3-dimensional closed orientable 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.** 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](https://doi.org/10.31392/MFAT-npu26.2.2022.05), arXiv:1908.04340.
- 1.5.** N. Kitazawa and O. Saeki, *Round fold maps on 3-manifolds*, Algebraic & Geometric Topology 23 (2023), 3745–3762, <https://msp.org/agt/2023/23-8/p09.xhtml>, arXiv:2105.00974.
- 1.6.** 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, <http://mfat.imath.kiev.ua/article/?id=1883>, arXiv:2302.02339, 2023.
- 1.7.** N. Kitazawa and O. Saeki, *Round fold maps of  $n$ -dimensional manifolds into  $\mathbb{R}^{n-1}$* , J. of Singularities, Vol. 26 (2013), 1–12, <http://www.journalofsing.org/volume26/article1.html>, DOI: 10.5427/jsing.2023.26a, arXiv:2111.15103.
- 1.8.** 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.

査読有論文やプロシーディング(欧文雑誌以外のもの)

- 2.1.** (A refereed paper in Japanese) N. Kitazawa, *On round fold maps (in Japanese)*, RIMS Kokyuroku Bessatsu B38 (2013), 45–59, <http://hdl.handle.net/2433/207808>.
- 2.2.** (An abstract of a talk in an international conference published after a (short) review) N. Kitazawa, *Explicit construction of explicit real algebraic functions and*

*real algebraic manifolds via Reeb graphs*, Algebraic and geometric methods of analysis 2023, 49–51, <https://imath.kiev.ua/~topology/conf/agma2023/contents/agma2023-theses.pdf>, this is the abstract of our talk in an international conference "Algebraic and geometric methods of analysis 2023" (<https://www.imath.kiev.ua/~topology/conf/agma2023/>) and after a (short) review process this is published.

## 博士論文

**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(一部)

- 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, *Realization problems of graphs as Reeb graphs of Morse functions with prescribed preimages*, the 2nd revised version is submitted to a refereed journal based on positive comments, arXiv:2108.06913.
- 4.4.** N. Kitazawa, *Restrictions on special generic maps on 6-dimensional or higher dimensional closed and simply-connected manifolds*, arXiv:2201.09437.
- 4.5.** N. Kitazawa, *Proofs of the non-existence of special generic maps on the 3-dimensional complex projective space*, arXiv:2202.00883.
- 4.6.** N. Kitazawa, *Characterizing certain classes of 6-dimensional closed and simply-connected manifolds via special generic maps*, arXiv:2205.04048.
- 4.7.** N. Kitazawa, *On the non-existence of special generic maps on complex projective spaces*, arXiv:2206.11500.
- 4.8.** N. Kitazawa, *A class of naturally generalized special generic maps*, arXiv:2212.03174.
- 4.9.** N. Kitazawa, *Smooth maps like special generic maps*, arXiv:2301.12126.
- 4.10.** N. Kitazawa, *Construction of real algebraic functions with prescribed preimages*, arXiv:2303.00953v2.
- 4.11.** 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, arXiv:2303.10723, 2024.
- 4.12.** N. Kitazawa, *A note on real algebraic maps which are topologically special generic maps*, submitted to a refereed journal, arXiv:2312.10646v2.
- 4.13.** 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.
- 4.14.** N. Kitazawa, *Arrangements of small circles for Morse-Bott functions and regions surrounded by them*, arXiv:2412.03846v2, 2024.
- 4.15.** N. Kitazawa, *Characterizing 3-dimensional manifolds represented as connected sums of Lens spaces,  $S^2 \times S^1$ , and torus bundles over the circle by certain Morse-Bott functions*, arXiv:2412.11397, 2024.

**4.16** N. Kitazawa, *On reconstructing Morse functions with prescribed preimages on  $3$ -dimensional manifolds*, a kind of addenda to the article "1.8" here, submitted to a refereed journal, arXiv:2412.20626, 2024.

○**4.17**. 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 second submission to a refereed journal.