

List of Papers

Yasuo Matsushita

December 23, 2017

- **45** Y. Matsushita, P. R. Law, *Counterexamples to Goldberg Conjecture with reversed orientation on Walker 8-manifolds of neutral signature*, The 20th International Workshop on Hermitian Symmetric Spaces and Submanifold, Kyungpook National University, Daegu, Korea, 26 - 30, 2016. To appear in The 20th Proceedings [IWHSS2016], Springer Proceedings in Mathematics and Statistics, July 2017.
- **44** M. Kimura, Y. Matsushita, and T. Hikiyama, *Parametric resonance of intrinsic localized models in coupled cantilever arrays*, Phys. Lett A, 380 (2016), 2823 - 2827.
- **43** Y. Matsushita, P. R. Law and N. Katayama *Neutral geometry in 4-dimension and counterexamples to Goldberg conjecture constructed on Walker 6-manifolds*, Proceedings of The 19th International Workshop on Hermitian-Grassmannian Submanifolds and Its Applications & The 10th RIRCM-OCAMI Joint Differential Geometry Workshop, Institute for Mathematical Sciences (NIMS), Daejeon, South Korea, 26-28 October, 2015.
- **42** P. R. Law and Y. Matsushita, *Real AlphaBeta-Geometries and Walker Geometry*, Journal of Geometry and Physics, 65 (2013), 35-44.
- **41** P. R. Law and Y. Matsushita, *Algebraically Special, Real Alpha-Geometries*, Journal of Geometry and Physics, 61 (2011), 2064-2080.
- **40** Y. Matsushita, *Geometric structures in four-dimension and almost Hermitian structures in AIP Conference Proceedings*, Volume 1340, International Workshop on Complex Structures, Integrability and Vector Fields (2011) 66-80.
- **39** P. R. Law and Y. Matsushita, *A Spinor Approach to Walker Geometry*, Communications in Mathematical Physics 282 (2008), 577-623.
- **38** J. Davidov, J.C.Díaz-Ramos, E. García-Río, Y. Matsushita, O. Muškarov and R. Vázquez-Lorenzo, *Hermitian Walker 4-manifolds*, Journal of Geometry and Physics 58 (3) (2008), 307-323.
- **37** E. García-Río, S. Haze and N. Katayama and Y. Matsushita, *Symplectic, Hermitian, Kähler and Einstein structures on Walker 4-manifolds* Journal of Geometry 90 (2008), 56-65.
- **36** Y. Matsushita, Counterexamples of compact type to the Goldberg conjecture and various version of the conjecture, pp.222-233, Proceedings of The 8th International Workshop on Topics in contemporary Differential Geometry, Comomplex Complex Structures and Vector Fields, Sofia, Bulgaria, August 20 - 26, 2006, ed. S. Dimiev and K. Sekigawa, World Scientific 2007, ISBN 978-981-270-790-1
- **35** Y. Matsushita, S. Haze and P. R. Law, *Almost Kähler-Einstein structures on 8-dimensional Walker manifolds*, Monatshefte für Mathematik 150 (2007), 41-48.
- **34** J. Davidov, J.C.Diaz-Ramos, E. Garcia-Rio, Y. Matsushita, O. Muškarov and R. Vazquez-Lorenzo, *Almost Kahler Walker 4-manifolds* Journal of Geometry and Physics 57 (2007), 1075-1088.
- **33** Y. Matsushita, *Four-dimensional geometric structures and almost complex structures — solvmanifolds $Sol_{m,n}^4$ (Neutral Version) —: III-N*, JP Journal of Geometry and Topology 6 (2) (2006), 197-210.

- **32** Y. Matsushita, *Four-dimensional geometric structures and almost complex structures — Nilmanifolds Nil^4 (Neutral Version) — : II-N*, JP Journal of Geometry and Topology 6 (2) (2006), 183–195.
- **31** Y. Matsushita, *Four-dimensional geometric structures and almost complex structures — Product manifolds $H^3 \times E^1$ (Riemannian Version) — : IV-R*, JP Journal of Geometry and Topology 6 (1) (2006), 35–44.
- **30** Y. Matsushita, *Four-dimensional geometric structures and almost complex structures solvmanifolds $Sol_{m,n}^4$ — Riemannian Version — : III-R*: JP Journal of Geometry and Topology 6 (1) (2006), 25–33.
- **29** Y. Matsushita, *Four-dimensional manifolds with two kinds of double almost Hermitian structures*, JP Journal of Geometry and Topology 6 (1) (2006), 1–23.
- **28** Y. Matsushita, *Four-dimensional geometric structures and almost complex structures General Procedure (Neutral Version) — : I-N*, JP Journal of Geometry and Topology 5 (3) (2005), 251–274.
- **27** Y. Matsushita, *Four-dimensional geometric structures and almost complex structures — Nilmanifolds Nil^4 (Riemannian Version) — : II-R*, JP Journal of Geometry and Topology 5 (2) (2005), 177–186.
- **26** Y. Matsushita, *Four-dimensional geometric structures and almost complex structures General Procedure (Riemannian Version) — : I-R*, JP Journal of Geometry and Topology 5 (2) (2005), 155–176.
- **25** A. Bonome, R. Castro and L. M. Hervella and Y. Matsushita, *Flat almost Norden metrics with nonintegrable almost complex structures in dimension four*, JP Journal of Geometry and Topology 5 (2) (2005), 141–153.
- **24** A. Bonome, R. Castro, and L. M. Hervella and Y. Matsushita, *Construction of Norden structures on neutral 4-manifolds*, JP Journal of Geometry and Topology 5 (2) (2005), 121–140.
- **23** Iago García-Ramírez, Eduardo García-Río and Y. Matsushita, *Application of Bochner-Weizenböck formulas to symplectic and complex pairs to be Kähler pairs in dimension four*, Proceedings in honor of Professor K. Sekigawa’s 60th birthday, “Topics in Almost Hermitian Geometry and the Related Fields,” World Scientific July 2005.
- **22** Y. Matsushita, *The existence of indefinite metrics of signature $(++--)$ and two kinds of almost complex structures in dimension four*, Proceedings of *The Seventh International Workshop on Complex Structures and Vector Fields*, Plovdiv, Bulgaria, August 31 - September 4, 2004. World Scientific 2005, “Contemporary Aspects of Complex Analysis, Differential Geometry and Mathematical Physics,” World Scientific July 2005.
- **21** Y. Matsushita, *On Euler characteristics and Hirzebruch indices of four-dimensional almost para-Hermitian manifolds*, JP Journal of Geometry and Topology, **5**, (2005) 115 - 120.
- **20** Y. Matsushita, *Walker 4-manifolds with proper almost complex structures*, Journal of Geometry and Physics **55**, (2005) 385 - 398.
- **19** M. Chaichi, E. Garcia-Rio and Y. Matsushita, *Curvature properties of four-dimensional Walker metrics* Classical and Quantum Gravity **22** (2005), 559-577.
- **18** Y. Matsushita, *Four-dimensional Walker metrics and symplectic structures*, Journal of Geometry and Physics **52** (2004), 89–99.
- **18** Y. Matsushita and P. R. Law, *Hitchin-Thorpe Type Inequalities for Pseudo-Riemannian 4-Manifolds of Metric Signature $(++--)$* , Geometriae Dedicata **87** (2001), 65–89.

- **16** E. García-Río, R. Vázquez-Lorenzo and Y. Matsushita, *Paraquaternionic Kähler Manifolds*, Rocky Mountain Journal of Mathematics **31** (2001), 237–260.
- **15** E. García-Río and Y. Matsushita, *Isotropic Kähler structures on Engel 4-manifolds*, Journal of Geometry and Physics **33** (2000), 288–294.
- **15** A. Bonome, R. Castro, E. Garcia-Rio, Y. Matsushita and L. M. Hervella, *Pseudo-Chern classes and opposite Chern classe of indefinite almost Hermitian manifolds*, Acta Mathematica Hungaria **75** (1997), 299–16.
- **13** A. Bonome, R. Castro, E. García-Río, Y. Matsushita and L. M. Hervella, *Kähler-Einstein metrics on a $K3$ surface cannot be almost Kähler with respect to an opposite almost complex structure*, Kodai Mathematical Journal **18** (1995), 506–514.
- **12** A. Bonome, R. Castro, E. García-Río, Y. Matsushita and L. M. Hervella, *Almost complex manifolds with holomorphic distributions*, Rendiconti di Matematicas (Roma) **14** (1995), 567–589.
- **11** A. Bonome, R. Castro, E. García-Río, Y. Matsushita and L. M. Hervella, *Null holomorphically flat indefinite almost Hermitian manifolds*, Illinois Journal of Mathematics **39** (1995), 635–660.
- **10** Y. Matsushita, *Equivalence classes of fields of 2-planes and two kinds of almost complex structures on compact 4-dimensional manifolds*, manuscripta mathematica **88** (1995), 409–415.
- **9** Y. Matsushita, *Some remarks on fields of 2-planes on compact smooth 4-manifolds*, Advanced Studies in Pure Mathematics **22** (1993), 153–167.
- **8** Y. Matsushita, *Fields of 2-planes and two kinds of almost complex structures on compact 4-dimensional manifolds*, Mathematische Zeitschrift **207** (1991), 281–291.
- **7** Y. Matsushita, *Fields of 2-planes on compact simply connected smooth 4-manifolds*, Mathematische Annalen **208** (1988), 687–689.
- **6** Y. Matsushita, *Pseudo-Chern classes of an almost pseudo-Hermitian manifold*, Transactions of the American Mathematical Society **301** (1987), 665–677.
- **5** Y. Matsushita, *Pseudo-Pontrjagin classes*, Proceedings of the American Mathematical Society **93** (1985), 521–524.
- **4** N. Katayama and Y. Matsushita, *A problem on closed orbits in a cosmological model*, Tensor (N.S.) **42** (1985), 174–178.
- **3** Y. Matsushita, *Thorpe-Hitchin inequality for compact Einstein 4-manifolds of metric signature $(+ + - -)$ and the generalized Hirzebruch index formula*, Journal of Mathematical Physics **24** (1983), 36–40.
- **2** Y. Matsushita, *Inequality for the Euler characteristic of compact Einstein 4-manifolds*, Mathematica Japonica **26** (1981), 77–79.
- **1** Y. Matsushita, *On Euler characteristics of compact Einstein 4-manifolds of metric signature $(+ + - -)$* , Journal of Mathematical Physics **22** (1981), 979–82.