

LIST OF PUBLICATIONS

Mu-Tao Wang

December 2008

Publications

1. (with S.-T. Yau) “Quasilocal mass in general relativity” to appear in Phys. Rev. Lett. arXiv:08041174v3.
2. (with S.-T. Yau) “Isometric embeddings into the Minkowski space and new quasi-local mass” to appear in Comm. Math. Phys. arXiv:08051370v3.
3. (with Y.-I. Lee) “Hamiltonian stationary cones and self-similar solutions in higher dimension”, to appear in Trans. Amer. Math. Soc. arXiv:0802.0359
4. “Lectures on mean curvature flows in higher codimensions”, Handbook of Geometric Analysis, No. 1, Advance Lectures in Mathematics, Vol.7, Int. Press, Somerville, MA, 2008.
5. “Some recent developments in Lagrangian mean curvature flows”, Surveys in differential geometry. Vol. XII, Surv. Differ. Geom., IX, Int. Press, Somerville, MA, 2008.
6. “Isometric embeddings and quasi-local mass” in the Proceedings of the fourth International Congress of Chinese Mathematicians, 2007
7. (with Y.-I. Lee) “Hamiltonian stationary shrinkers and expanders for Lagrangian mean curvature flows”, to appear in J. Differential Geom. arXiv:0707.0239
8. (with Y.-I. Lee) “A note on the stability and uniqueness for solutions to the minimal surface system”, Math. Res. Lett. 15 (2008), no. 1, 197–206.
9. (with S.-T. Yau) “A generalization of Liu-Yau’s quasi-local mass”, Comm. Anal. Geom. 15 (2007), no. 2, 249–282.
10. “A convergence result of the Lagrangian mean curvature flow”, in the Proceedings of the third International Congress of Chinese Mathematicians.
11. “Subsets of Grassmannians preserved by mean curvature flow”, Comm. Anal. Geom. 13 (2005), no.5.

12. "Remarks on a class of solutions to the minimal surface system" Geometric evolution equations, 229-235, Contemp. Math., 367, Amer. Math. Soc., Providence, RI, 2005.
13. (with M.-P. Tsui) "Mean curvature flows and isotopy of maps between spheres", Comm. Pure. Appl. Math. 57 (2004), no. 8 , 1110-1126.
14. "Interior gradient bounds for solutions to the minimal surface system", Amer. J. Math. 126 (2004), no.4, 921-934.
15. "The mean curvature flow smoothes Lipschitz submanifolds", Comm. Anal. Geom. 12 (2004) no. 3, 581-599.
16. "The Dirichlet problem for the minimal surface system in arbitrary codimension", Comm. Pure. Appl. Math. 57 (2004), no. 2, 267-281.
17. "Gradient estimates for mean curvature systems", Abstract and applied analysis, 385-392, World Sci. Publ., River Edge, NJ, 2004.
18. (with Y.-I. Lee) "A stability criterion for nonparametric minimal submanifolds", Manuscripta Mathematica. 112 (2003), no. 2, 161-169.
19. "Gauss maps of the mean curvature flow", Math. Res. Lett. 10 (2003), no. 2-3, 287-299.
20. "Mean curvature flow in higher codimension", in the Proceedings of the second International Congress of Chinese Mathematicians, 2002.
21. "On graphic Bernstein type results in higher codimension", Trans. Amer. Math. Soc. 355 (2003), no. 1, 265-271.
22. (with K. Smoczyk) "Mean curvature flows of Lagrangian submanifolds with convex potentials", J. Differential Geom. 62 (2002), no. 2, 243-257.
23. (with M.-P. Tsui) "A Bernstein type result for special Lagrangian submanifolds", Math. Res. Lett. 9 (2002), no.4, 529-536.
24. "Long-time existence and convergence of graphic mean curvature flow in arbitrary codimension", Invent. Math. 148 (2002) 3, 525-543.
25. "Deforming area preserving diffeomorphism of surfaces by mean curvature flow", Math. Res. Lett. 8 (2001), no.5-6, 651-662.
26. "Mean curvature flow of surfaces in Einstein Four-Manifolds", J. Differential Geom. 57 (2001), no.2, 301-338.

27. "Generalized harmonic maps and representations of discrete groups", *Comm. Anal. Geom.* 8 (2000), no. 3, 545-563.
28. "On representations of complex hyperbolic lattices", *Math. Res. Lett.* 6 (1999), no.1, 99-105.
29. "A fixed point theorem of isometry action on Riemannian manifolds", *J. Differential Geom.* 50 (1998), no.2, 249-267.
30. "Generalized harmonic maps and representations of discrete groups", Thesis-Harvard University, 1998.
31. (with C. Lin) "A note on the exhaustion function for complete manifolds", *Tsing Hua lectures on geometry and analysis* (Hsinchu, 1990-1991), 269-277, *Internat. Press, Cambridge, MA, 1997.*