

Publications by Ken-ichi Sakan

Papers :

- [1] Boundary groups of a Fuchsian group of the second kind. *Tôhoku Math. J. (2)* 28 (1976), no.1, 99–104.
- [2] On stability of finitely generated Kleinian groups. *Osaka J. Math.* 17 (1980), no.1, 165–176.
- [3] On quasiconformal mappings compatible with a Fuchsian group. *Osaka J. Math.* 19 (1982), no.1, 159–170.
- [4] On extremal quasiconformal mappings compatible with a Fuchsian group. *Tôhoku Math. J. (2)* 34 (1982), no.1, 87–100.
- [5] On extremal quasiconformal mappings compatible with a Fuchsian group with a dilatation bound. *Tôhoku Math. J. (2)* 37 (1985), no.1, 79–93.
- [6] Necessary and sufficient conditions for extremality in certain classes of quasiconformal mappings. *J. Math. Kyoto Univ.* 26 (1986), no.1, 31–37.
- [7] (with R. Fehlmann) On the set of substantial boundary points for extremal quasiconformal mappings. *Complex Variables Theory Appl.* 6 (1986), no.2-4, 323–335.
- [8] (with R. Fehlmann) On extremal quasiconformal mappings with varying dilatation bounds. *Osaka J. Math.* 23 (1986), no.4, 751–764.
- [9] A fundamental variational lemma for extremal quasiconformal mappings compatible with a Fuchsian group. *Tôhoku Math. J. (2)* 39 (1987), no.1, 105–114.
- [10] (with D. Partyka) Harmonic and quasiconformal mappings which agree on the boundary. *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 49 (1995), 159–171.
- [11] (with J. Zajac) The Douady-Earle extension of quasihomographies. *Generalizations of complex analysis and their applications in physics (Warsaw/Rynia, 1994)*, 35–44, Banach Center Publ., 37, Polish Acad. Sci., Warsaw, 1996.
- [12] (with D. Partyka) Quasiconformality of harmonic extensions. *Continued fractions and geometric function theory (CONFUN) (Trondheim, 1997)*. *J. Comput. Appl. Math.* 105 (1999), no.1-2, 425–436.
- [13] (with D. Partyka) A note on non-quasiconformal harmonic extensions. *Bull. Soc. Sci. Lett. Łódź* 47(1997), 51–63, Sér. Rech. Déform. 23.
- [14] (with D. Partyka and J. Zajac) The harmonic and quasiconformal extension operators. *Quasiconformal geometry and dynamics (Lublin, 1996)*, 141–177, Banach Center Publ., 48, Polish Acad. Sci., Warsaw, 1999.
- [15] (with D. Partyka) A conformally invariant dilatation of quasisymmetry. *XII-th Conference on Analytic Functions (Lublin, 1998)*. *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 53 (1999), 167–181.
- [16] (with D. Partyka) A pseudo-metric on the space of generalized quasisymmetric automorphisms of a Jordan curve, pp.895–902, in *Proceedings of the Second ISAAC Congress (1999 8/16-8/21, Fukuoka Institute of Technology, Japan)*, Kluwer Academic Publishers, 2000.
- [17] (with D. Partyka) On pseudo-metrics on the space of generalized quasisymmetric

automorphisms of a Jordan curve, *Ann. Univ. Mariae Curie-Skłodowska Sect. A* 55 (2001), 115–138.

[18] (with D. Partyka) On Heinz’s inequality, *Bull. Soc. Sci. Lett. Łódź* 52(2002), 27–34, *Sér. Rech. Déform.* 36.

[19] (with D. Partyka) On an asymptotically sharp variant of Heinz’s inequality, *Ann. Acad. Sci. Fenn. Math.* 30 (2005), 167–182.

[20] (with D. Partyka) Three variants of Schwarz’s lemma for harmonic mappings, *Bull. Soc. Sci. Lett. Łódź* 56(2006), 23–36, *Sér. Rech. Déform.* 51.

[21] (with D. Partyka) On bi-Lipschitz type inequalities for quasiconformal harmonic mappings, *Ann. Acad. Sci. Fenn. Math.* 32(2007), 579–594.

[22] (with D. Partyka) Distortion of the area measure for one-to-one harmonic mappings of the unit disk onto itself, *Sci. Bull. Chelm Math. Comput. Sci.* 2(2007), 39–48.

[23] (with D. Partyka) On a variant of Heinz’s inequality for harmonic mappings of the unit disk onto bounded convex domains, *Bull. Soc. Sci. Lett. Łódź* 59 (2009), 25–36, *Sér. Rech. Déform.* 59.

[24] (with V.Gutlyanskiĭ and T.Sugawa) On  $\mu$ -conformal homeomorphisms and boundary correspondence, *Complex Variables and Elliptic Equations* 58 (2013),no.7, 947-962.

[25] (with D. Partyka) On a result of Clunie and Sheil-Small, *Ann. Univ. Mariae Curie-Skłodowska, Sectio A*.66 (2012),no.2, 81-92.

[26] (with D. Partyka) A simple deformation of quasiconformal harmonic mappings in the unit disk, *Ann. Acad. Sci. Fenn. Math.* 37 (2012), 539-556.

[27] (with D. Partyka) Quasiconformal and Lipschitz harmonic mappings of the unit disk onto bounded convex domains, *Ann. Acad. Sci. Fenn. Math.* 39(2014), 811-830.

[28] (with D. Partyka) Heinz type inequalities for Poisson integrals, *Computational Methods and Function Theory*, 14(2014), 219-236.

[29] (with D. Partyka and J. Zhu) Quasiconformal harmonic mappings with the convex holomorphic part, *Ann. Acad. Sci. Fenn. Math.* 43(2018), 401-418.

[30] (with D. Partyka) Injectivity of harmonic mappings with a specified injective holomorphic part, *Ann. Acad. Sci. Fenn. Math.* 47(2022), 573-586.

[31] (with D. Partyka) Quasiconformality of harmonic mappings of the unit disk, *Current Research in Mathematical and Computer Sciences III*, eds. : A.Lecko, D.K.Thomas, Publisher UWM, Olsztyn, 2022, 327-352.

Translation :

Tristan Needham, *Visual Complex Analysis*, joint translation by H.Ishida, Y.Imayoshi, H.Ohtake, Y.Komori, K.Sakan, T.Sugawa, M.Taniguchi, M.Nishio, H.Maitani, H.Masaoka, Baihuukan, 2002.