

**Komeda, Jiryo**

**Existence of the primitive Weierstrass gap sequences on curves of genus 9.** (English)

Zbl 1058.14055

Bol. Soc. Bras. Mat., Nova Sér. 30, No. 2, 125-137 (1999).

Summary: We show that for any possible Weierstrass gap sequence  $L$  on a curve of genus 9 with twice the smallest positive non-gap  $>$  the largest gap there exists a pointed non-singular curve  $(C, P)$  over an algebraically closed field of characteristic 0 such that the gap sequence at  $P$  is  $L$ .

**MSC:**

14H55 Riemann surfaces; Weierstrass points; gap sequences

14H45 Special algebraic curves and curves of low genus

Cited in 2 Documents

**Keywords:**

non-singular curves; gap sequences; toric varieties; trigonal curves

**Full Text:** DOI

**References:**

- [1] Buchweitz, R. O., On Zariski's criterion for equisingularity and non-smoothable monomial curves. preprint 113, University of Hannover, (1980).
- [2] Coppens, M., The Weierstrass gap sequences of the total ramification points of trigonal coverings of  $P^1$ . Indag. Math.47: (1985), 245-276. · Zbl 0592.14025
- [3] Coppens, M., The Weierstrass gap sequences of the ordinary ramification points of trigonal coverings of  $P^1$ : Existence of a kind of Weierstrass gap sequence. J. Pure Appl. Algebra.43: (1986), 11-25. · Zbl 0616.14012 · doi:10.1016/0022-4049(86)90002-2
- [4] Eisenbud, D. and Harris, J., Existence, decomposition, and limits of certain Weierstrass points. Invent. Math.87: (1987), 495-515. · Zbl 0606.14014 · doi:10.1007/BF01389240
- [5] Kato, T. and Horiuchi, R., Weierstrass gap sequences at the ramification points of trigonal Riemann surfaces. J. Pure Appl. Algebra.50: (1988), 271-285. · Zbl 0649.14009 · doi:10.1016/0022-4049(88)90105-3
- [6] Kim, S.J., On the existence of Weierstrass gap sequences on trigonal curves. J. Pure Appl. Algebra.63: (1990), 171-180. · Zbl 0712.14019 · doi:10.1016/0022-4049(90)90024-C
- [7] Komeda, J., On Weierstrass points whose first non-gaps are four. J. Reine Angew. Math.341: (1983), 68-86. · Zbl 0498.30053 · doi:10.1515/crll.1983.341.68
- [8] Komeda, J., On primitive Schubert indices of genus  $g$  and weight  $g-1$ . J. Math. Soc. Japan.43: (1991), 437-445. · Zbl 0753.14028 · doi:10.2969/jmsj/04330437
- [9] Komeda, J., On the existence of Weierstrass points whose first non-gaps are five. Manuscripta Math.76: (1992), 193-211. · Zbl 0770.30038 · doi:10.1007/BF02567755
- [10] Komeda, J., On the existence of Weierstrass gap sequences on curves of genus  $?8$ . J. Pure Appl. Algebra.97: (1994), 51-71. · Zbl 0849.14011 · doi:10.1016/0022-4049(94)90039-6
- [11] Maclachlan, C., Weierstrass points on compact Riemann surfaces. J. London Math. Soc.3: (1971), 722-724. · Zbl 0212.42402 · doi:10.1112/jlms/s2-3.4.722
- [12] Oliveira, G., Weierstrass semigroups and the canonical ideals of non-trigonal curves. Manuscripta Math.71: (1991), 431-450. · Zbl 0742.14029 · doi:10.1007/BF02568416
- [13] Pinkham, H., Deformations of algebraic varieties with  $G_m$ -action. Astérisque20: (1974), 1-131. · Zbl 0304.14006
- [14] Stöhr, K.O. and Viana, P., Weierstrass gap sequences and moduli varieties of trigonal curves. J. Pure Appl. Algebra.81: (1992), 63-82. · Zbl 0768.14016 · doi:10.1016/0022-4049(92)90135-3

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.