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The Weierstrass semigroups on double covers of genus two curves. (English) Zbl 1316.14056
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A submonoid of non-negative integers is called a numerical semigroup if its complement is a finite set. The cardinality of the complement is called the genus. A numerical semigroup obtained by an algebraic curve and its point is called Weierstrass semigroup. A numerical semigroup is said to be of double covering type if it is obtained by an algebraic curve which is double covering of a curve and its ramification point. Numerical semigroups of double covering type obtained by double covering of curves of genus 0 and 1 were determined completely. In this paper, the authors determined numerical semigroups of double covering type obtained by double covering of curves of genus 2.

Reviewer: [Takanori Ayano \(Osaka\)](#)

MSC:

[14H55](#) Riemann surfaces; Weierstrass points; gap sequences
[14H45](#) Special algebraic curves and curves of low genus
[20M14](#) Commutative semigroups

Cited in **3** Documents

Keywords:

[numerical semigroup](#); [Weierstrass semigroup](#); [double cover of a curve](#); [curve of genus two](#)

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