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connected type -- 5.2. Separating points in different edges -- 5.3. Separating vertices -- 5.4. Faithful tropicalization of the minimal skeleton -- Chapter 6. Faithful tropicalization of minimal skeleta in low genera -- 6.1. Genus 0 case -- 6.2. Genus 1 case -- Chapter 7. Faithful tropicalization of arbitrary skeleta -- Notation and terminology of Chapter 7 -- 7.1. Geodesic paths -- 7.2. Stepwise vertical divisor associated to a point in (\cdot) -- 7.3. Base sections and \cdot -unimodularity sections -- 7.4. Good model -- 7.5. Proof of Proposition 7.8 -- 7.6. Proof of Theorem 1.2 -- 7.7. Upper bound for the dimension of the target space -- Chapter 8. Complementary results -- 8.1. Theorem 1.2 is optimal for curves in low genera -- 8.2. A very ample line bundle that does not admit a faithful tropicalization -- 8.3. Comparison with [42]. Chapter 9. Limit of tropicalizations by polynomials of a bounded degree -- 9.1. Statement of the result -- 9.2. Polynomial of bounded degree that separates two points -- 9.3. Proof of Theorem 1.7 -- Bibliography -- Subject Index -- Symbol Index -- Back Cover.

Sommario/riassunto

"For a connected smooth projective curve of genus g , global sections of any line bundle L with $\deg(L) \geq 2g - 1$ give an embedding of the curve into projective space. We consider an analogous statement for a Berkovich skeleton in nonarchimedean geometry: We replace projective space by tropical projective space, and an embedding by a homeomorphism onto its image preserving integral structures (or equivalently, since \mathbb{R} is a curve, an isometry), which is called a faithful tropicalization. Let k be an algebraically closed field which is complete with respect to a nontrivial nonarchimedean value. Suppose that k is defined over \mathbb{R} and has genus $g \geq 2$ and that \mathbb{R} is a skeleton (that is allowed to have ends) of the analytification \mathbb{R}^{an} of \mathbb{R} in the sense of Berkovich. We show that if $\deg(L) \geq 3g - 1$, then global sections of L give a faithful tropicalization of \mathbb{R} into tropical projective space. As an application, when Y is a suitable affine curve, we describe the analytification Y^{an} as the limit of tropicalizations of an effectively bounded degree"--