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**Justin Chen\***, jchen646@math.gatech.edu. *Computing Unit Groups of Curves.*

The group of units modulo constants of an affine variety over an algebraically closed field is free abelian of finite rank. Computing this group is difficult but of fundamental importance in tropical geometry, where it is desirable to realize intrinsic tropicalizations. We present practical algorithms for computing unit groups of smooth curves of low genus. Our approach is rooted in divisor theory, based on interpolation in the case of rational curves and on methods from algebraic number theory in the case of elliptic curves. (Received January 23, 2019)