

1154-14-1163

Kalila Joelle Sawyer* (kalila.sawyer@uky.edu) and **David Jensen**. *Scrollar Invariants of Tropical Curves*.

The *scrollar invariants* of a special divisor D on a k -gonal algebraic curve X are a family of invariants that provide insight into the behavior of D and the geometry of X . In the classical case, the ranks of multiples cD of D form a convex sequence completely determined by the scrollar invariants, which are extremely useful but hard to compute in this setting. We use degeneration techniques to investigate this question in the tropical setting, where combinatorial tools provide helpful insight. We begin by defining scrollar invariants of tropical curves with a fixed rank 1 divisor. We examine the behavior of scrollar invariants under specialization, and compute these invariants for a much-studied family of tropical curves. Our examples highlight many parallels between the classical and tropical theories, but also point to some substantive distinctions. (Received September 13, 2019)