



Motivation

- Tropical curves and tropical pluri-canonical divisors are defined to mimic the behavior of the corresponding algebraic objects. Potential application: solve problems in the tropical language and lift the solution to algebraic geometry. For this need to know which tropical objects are actually algebraic. This is the realizability problem.
- By [Car15] know: realizability problem for tropical curves with divisor is as hard as finding rational points in a scheme (very hard problem!). We present a solution to the problem when restricted to a special class of divisors.
- This generalizes [MUW17], which solved the realizability problem for tropical canonical divisors.
- A combinatorial criterion for realizability has computational applications for topology of strata.
- We solve various related problems: realizability for normalized covers of tropical curves, realizability of enhanced level graphs, ...

References

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