CONSTRUCTING REAL ALGEBRAIC CURVES USING TROPICAL GEOMETRY

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ABSTRACT. A main root as well as application of tropical geome-
try is the construction of real algebraic curves with certain prop-
erties (in continuation of Viros patchworking method). This has
proven to be particularly powerful in the context of real enumera-
tive geometry. I will present two results in this direction. The first
concerns the count of real Hurwitz numbers, the second deals with
the topological classification of real rational quintic curves in the
plane