

1077-14-1858 **Joseph Rabinoff*** (rabinoff@math.harvard.edu), Department of Mathematics, One Oxford Street, Cambridge, MA 02138. *Far beyond Newton polygons.*

The theorem of the Newton polygon allows one to calculate the number of zeros with given valuation of a polynomial or power series in one variable over a non-Archimedean field. We will explain in what sense a lifting theorem for the intersection of tropicalizations of complementary-dimensional subschemes of a torus is a useful generalization of the theorem of the Newton polygon to higher dimensions. This lifting theorem also gives an effective version of Bernshtein's theorem in the case of a trivial valuation.

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