



# YMC 2006



Young Mathematicians Conference 2006

*August 4<sup>th</sup>-6<sup>th</sup> at The Ohio State University.*

LAURENT-RATIONAL POINTS ON POLYNOMIAL CURVES

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**Abstract of Report Talk:** Tropical geometry is used to obtain information about whether a given polynomial with Laurent-series coefficients will have Laurent-series points on its zero locus. This is done by taking an algorithm for finding Puiseux-series roots to one-variable polynomials and generalizing it to the two-variable case. Certain results are then proved about the solutions generated by this algorithm. Some of these results can also be found using a version of Hensel's Lemma.

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