

ON THE LIOUVILLE FUNCTION ON RATIONAL POLYNOMIAL VALUES

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ABSTRACT: There are many conjectures and results in the literature concerning the behavior of the Liouville function λ at integral values of a polynomial from $\mathbb{Z}[x]$. These predict that in this context λ should behave in a 'random' way. We extend the investigations to rational polynomial values, and formulate a conjecture suggesting that the behavior of λ should be 'random' in this sense, as well. We also provide some theorems supporting this conjecture.

The presented new results are joint with **G. Hajdu**.

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