On a Frobenius problem for polynomials

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(joint work with R. Gondim and M. Rodriguez.)

We extend the famous diophantine Frobenius problem to the setting of polynomials over a field k. Similar to the classical problem, we show that the $n = 2$ case of the Frobenius problem for polynomials is easy to solve. In addition, we translate a few results from the Frobenius problem over $\mathbb{Z}$ to $k[t]$. When k is a finite field, we discuss some striking contrasts between the classical and the polynomial case, and mention a few ideas for future research.

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