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Theta series of imaginary quadratic global function fields

Let $L/\mathbb{Q}$ be an imaginary quadratic extension. For an ideal class A of L one defines the partial zeta function ζ_A. Then ζ_A can be written as $\sum r_A(n)n^{-s}$ with certain well-defined integers $r_A(n)$. The theta series $\Theta_A(z) := \sum_{n\geq 0} r_A(n)\exp(2\pi inz)$ has a nice transformation law on certain congruence group. In this talk, we will give an analogue story in global function field with finite constant field $\mathbb{F}_q$ of characteristic $p \neq 2$. Similarly, the Fourier coefficients of the theta series in my case are also come from the cardinality of norm form. We will see that it is an automorphic form on GL_2.