

ALGEBRA AND NUMBER THEORY
SEMINAR

Weierstrass points on the Drinfeld modular Curve $X_0(\mathfrak{p})$

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Abstract: For q a power of a prime, consider the ring $\mathbb{F}_q[T]$. Due to the many similarities between $\mathbb{F}_q[T]$ and the ring of integers \mathbb{Z} , we can define for $\mathbb{F}_q[T]$ objects that are analogous to elliptic curves, modular forms, and modular curves. In particular, for \mathfrak{p} a prime ideal in $\mathbb{F}_q[T]$, we can define the Drinfeld modular curve $X_0(\mathfrak{p})$, and study the reduction modulo \mathfrak{p} of its Weierstrass points, as is done in the classical case by Rohrlich, and Ahlgren and Ono. In this talk we will present some partial results in this direction, defining all necessary objects as we go.

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MATHEMATICS AND COMPUTER SCIENCE
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