

**Title:**

Frobenius difference equations and transcendence

**Abstract:**

This talk will focus on transcendence theory over function fields in positive characteristic. In particular, we relate periods of Drinfeld modules, zeta values, logarithms, and more, to special values of solutions of Frobenius difference equations. By way of a result that equates the dimension of the associated difference Galois group to the transcendence degree of its period matrix, we will discuss various algebraic independence theorems over function fields.