

Upstate New York Online Number Theory Colloquium

Time and Date: 1:30 pm EST December 7, 2021

Speaker: Matt Papanikolas

Title: Product formulas for periods of Drinfeld modules

Abstract: We investigate new formulas for periods and quasi-periods of Drinfeld modules, similar to the product formula for the fundamental period of the Carlitz module obtained through the Anderson-Thakur function. To these ends we develop tools for constructing rigid analytic trivializations for Drinfeld modules as infinite products of Frobenius twists of matrices, from which we recover the rigid analytic trivialization given by Pellarin in terms of Anderson generating functions. One particular advantage is that the terms of these infinite products can be determined from only a finite amount of initial explicit calculation. Joint with C. Khaochim.