HYPERDERIVATIVES OF PERIODS OF DRINFELD MODULES AND TRANSCENDENCE

Changningphaabi Namoijam

We investigate hyperderivatives of periods of Drinfeld modules by studying an Anderson t-module whose periods involve hyperderivaties of periods of the given Drinfeld module. We further investigate transcendence of periods using Papanikolas' results on transcendence degree of the period matrix of a t-motive and dimension of its Galois group.