

ARITHMETIC ALGEBRAIC GEOMETRY - ONLINE SEMINAR

(organizers: Grzegorz Banaszak, UAM Poznań, Piotr Krasoń, US Szczecin)

Thursday, June 24, 2021 06:00 PM Warsaw

Speaker: Cristian D. Popescu,

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An Equivariant Tamagawa Number Formula for Drinfeld Modules and Applications

Abstract: I will present a generalization of Taelman's 2012 celebrated class-number formula for Drinfeld modules to the setting of (rigid analytic) L -functions of Drinfeld modular motives with Galois equivariant coefficients. I will discuss applications (e.g. a proof of the Drinfeld module analogue of the Brumer-Stark conjecture, constructions of new v -adic L -functions etc.) and potential extensions of this formula to the category of t -modules and t -motives. This lecture is based on the paper: <https://arxiv.org/abs/2004.05144>, joint with J. Ferrara, N. Green and Z. Higgins.