

# WYKŁAD WYDZIAŁOWY

w ramach seminarium

## ARYTMETYCZNA GEOMETRIA ALGEBRAICZNA

(organizatorzy: Grzegorz Banaszak, Piotr Krasoń)

Czwartek 14 lutego 2019, godz. 16:00, sala 212

Wydział Matematyczno-Fizyczny Uniwersytetu

Szczecińskiego ul. Wielkopolska 15, 70-451 Szczecin

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### *Character varieties and $(\varphi_L, \Gamma_L)$ -modules*

**Abstract:** After reviewing old work with Teitelbaum, in which we constructed the character variety  $X$  of the additive group  $o_L$  in a finite extension  $L/Q_p$  and established the Fourier isomorphism for the distribution algebra of  $o_L$ , I will briefly report on more recent work with Berger and Xie, in which we establish the theory of  $(\varphi_L, \Gamma_L)$ -modules over  $X$  and relate it to Galois representations. If time permits I will discuss an ongoing project with Venjakob. Our goal is to use this theory over  $X$  for Iwasawa theory.