



Einladung zum Vortrag im Rahmen des Kolloquiums des Departments Mathematik/Informatik

ONLINE Vortrag über Zoom:

<https://uni-koeln.zoom.us/j/92065425427?pwd=cUhUbFV3OFV3bnhuZ1R1QjlvSGZwdz09>

am Mittwoch, 19.05.2021 ab **16:30 Uhr**

Dr. Ramla Abdellatif (Université de Picardie Jules Verne)

zum Thema

***p*-modular representations of *p*-adic groups and Langlands correspondences**

Let p be a prime integer. Langlands correspondences can be seen as non-abelian generalizations of class field theory, with coefficients in various fields : either over complex numbers (*classical* correspondences), or over p -adic numbers (*p-adic* correspondences), or over fields of positive characteristic p (*modulo p* correspondences). The last case is motivated by deep arithmetic and number-theoretic questions, but it is far from being well understood, even for basic groups such as $GL_2(F)$ or $SL_2(F)$, F being a non-trivial finite extension of the field \mathbb{Q}_p of p -adic numbers, as it requires to understand irreducible smooth representations of such groups over fields of characteristic p .

The goal of this talk is to explain more precisely this context, to give a state of art of what is known so far and to explain our contributions to these questions. No specific knowledge on representation theory nor on p -adic groups is required, since we will mostly focus on the case of the special linear groups $SL_2(F)$ and give all necessary definitions.

Alle Interessenten sind herzlich eingeladen.

Die Dozenten der Mathematik und Informatik.