

Oberseminar Topologie: 26.10.2022

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Title: On the K-theory of the stack of L-parameters for GL_n

Abstract: According to a Conjecture of Fargues and Scholze the local Langlands correspondence for $GL_n(\mathbb{Q}_p)$ has an upgrade to an equivalence of categories between the (derived) category of certain sheaves on the stack of n -dimensional vector bundles on the so-called Fargues-Fontaine curve and the (derived) category of coherent sheaves on the stack of n -dimensional Weil-Deligne representations.

I will report on a joint project with Arthur Bartles where we give evidence to this conjecture by proving that both categories have the same K-theory.

In this talk I will explain the statements and give an idea how to compute the K-theory on both sides.