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Equivariant cohomology and the categorical local Langlands correspondence

The p -adic local Langlands correspondence currently posits a relationship between sets of simple objects of $\mathbf{Rep}(G)$, the category of smooth representations of a connected, reductive, p -adic group G , with sets of so-called Langlands parameters. In this talk, we discuss a conjectural interpretation of this correspondence given by a Koszul-like, algebraic relationship between certain full subcategories of $\mathbf{Rep}(G)$ and the equivariant cohomology of a geometrization of Langlands parameters. Furthermore, we demonstrate the implications that the conjecture has for the p -adic analogue of the Kazhdan-Lusztig conjecture.