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*Koszul duality patterns in the  $p$ -adic local Langlands correspondence*

The  $p$ -adic local Langlands correspondence currently posits a relationship between sets of irreducible representations 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 show that the correspondence can be lifted to a Koszul duality between certain full subcategories of  $\mathbf{Rep}(G)$  and categories resulting from a geometrization of Langlands parameters and describe the Koszul duality between these pairs of Abelian categories, explaining how many characteristics of the local Langlands program can be formalised through this perspective.