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Combinatorial Approach to ABV-packets for GL_n

There exists a significant conjecture in the local Langlands correspondence that A-packets are ABV-packets. For the case $G = GL_n$, the conjecture reduces to ABV-packets of Arthur type being singletons, which is a specialisation of the wider conjecture known as the Open-Orbit conjecture. In this introductory talk, we will reduce this problem to a combinatorial study using multisegments, since there exists a natural relationship between the combinatorics of multisegments and the structure of ABV-packets. The talk will focus on introducing the Mœglin-Waldspurger algorithm to compute the Zelevinskii involution and the structure for multisegments of Arthur type. Finally, an outline for the proof of the conjecture that ABV-packets of Arthur type are singletons will be presented using an argument based on numerical invariants and endoscopic decompositions.