

A Casselman–Shalika Formula for the Shalika Model of GL_n

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Abstract. The Casselman–Shalika method is a way to compute explicit formulas for periods of irreducible unramified representations of p -adic groups that are associated to unique models (*i.e.*, multiplicity-free induced representations). We apply this method to the case of the Shalika model of GL_n , which is known to distinguish lifts from odd orthogonal groups. In the course of our proof, we further develop a variant of the method, that was introduced by Y. Hironaka, and in effect reduce many such problems to straightforward calculations on the group.

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