Shalika germs were introduced as a tool for studying orbital integrals, objects that play a large role in harmonic analysis on $p$-adic groups. The Shalika germ expansion expresses regular semisimple orbital integrals in terms of nilpotent ones, in a neighborhood of the origin. Exact values of Shalika germs elude computation, except for those of a few Lie algebras of small rank. We prove that Shalika germs on $\mathfrak{sl}_n$ and $\mathfrak{sp}_{2n}$ belong to a class of motivic functions defined by Cluckers and Loeser by means of a first-order language of logic (Denef-Pas language). The proof involves Nevins’ combinatorial matching between two parametrizations of nilpotent orbits: a parametrization involving partitions, and DeBacker’s parametrization arising from the Bruhat-Tits building. As a result, we establish bounds on the Shalika germs that are uniform in $p$. This is joint work with Julia Gordon and Lance Robson. (Received September 15, 2016)