VINCENT SECHERRE, Université de la Méditerranée–Aix Marseille 2

l-modular representations of inner forms of $\mathrm{GL}(n)$ *over a* p*-adic field with* l *different from* p

Let G be an inner form of $\mathrm{GL}(n)$ over a p-adic field, and let l be a prime number different from p. Our aim is to give a classification of all irreducible smooth l-modular representations of G in terms of the discrete series of its Levi subgroups. Such a classification has been obtained for $\mathrm{GL}(n)$ by Zelevinsky (for complex representations) and by Vigneras (for l-modular representations). This work relies in particular on the study of the reduction modulo l of irreducible l-adic representations of G. It appears that, unlike the $\mathrm{GL}(n)$ case, integral cuspidal l-adic representations of G may not reduce into irreducible l-modular representations. We study and explain this phenomenon by using the theory of simple types.

Joint work with Alberto Minguez.