Rigid analytic quantisation and p-adic representations of p-adic Lie groups

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We introduce a sheaf $\widehat{\mathcal{D}}$ of locally Frechet-Stein algebras on smooth rigid analytic spaces that is morally a "rigid analytic quantisation" of the cotangent bundle. Using coadmissible equivariant $\widehat{\mathcal{D}}$-modules on rigid analytic ag varieties, we give an alternative approach to the localisation of admissible locally analytic representations of reductive compact p-adic Lie groups. Work in progress, joint with Simon Wadsley.