Séminaire de théorie des nombres

Le 19 mai 2025 à 14h (Jussieu)

Coadmissible Dcap-modules are microlocally perfect

Exposé de Andreas Bode
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Résumé : Ardakov–Wadsley introduced the sheaf Dcap of rapidly converging differential operators on a smooth rigid analytic variety. The category of coadmissible Dcap-modules is an analogue of that of coherent D-modules in the classical, complex setting and provides a powerful geometric framework for the study of p-adic representations. In this talk, I will show that locally, the Banach algebras involved in the definition of Dcap are Auslander regular rings – thus, coadmissible modules admit finite projective resolutions "locally on the cotangent bundle". As an application, we obtain projection formulae and adjunction results for Dcap-module operations.