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Signed p-adic L-functions of Bianchi modular forms

Let $p \geq 3$ be a prime number. Let K be an imaginary quadratic field in which p splits. Let $\mathcal{F}$ be a cuspidal Bianchi eigenform of weight (k, k) over K, where $k \geq 2$ is an integer. In this talk, we will discuss two scenarios of the decomposition of unbounded p-adic L-functions into a linear combination of signed p-adic L-functions in the spirit of Lei-Loeffler-Zerbes, Pollack, and Sprung.

The first half of the talk is about decomposing the two-variable p-adic L-functions $L_p(\mathcal{F})$ constructed by Williams for small slope cuspidal Bianchi eigenforms $\mathcal{F}$, which are non-ordinary at both the primes above p.

In the other half, we discuss a work in progress on p-adic Asai L-functions of Bianchi modular forms. We generalize the construction of Loeffler-Williams in the ordinary case to the non-ordinary case, giving rise to unbounded distributions, which we decompose into bounded measures.