BOSTON UNIVERSITY NUMBER THEORY SEMINAR

p-adic Hodge theory in rigid analytic families

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Monday, Jan. 28 at 4:15 pm
111 Cummington Street, MCS B21
Tea and cookies in MCS 153 (note special location!) at 3:45 pm

Abstract: Broadly speaking, p-adic Hodge theory is the study of representations of Galois groups of p-adic fields on vector spaces with p-adic coefficients. One can use the theory of (φ, Γ)-modules to convert such Galois representations into simpler linear algebra, and one can also classify such representations in terms of how arithmetically interesting they are. In my talk, I will discuss extensions of this theory to p-adic families of Galois representations. Such families arise naturally in the contexts of Galois deformation rings and p-adic modular forms.