Abstract

In the Lubin–Tate setting, we study pairings for analytic (φ_L, Γ_L)-modules and prove an abstract reciprocity law which then implies a relation between the analogue of Perrin-Riou's big exponential map as developed by Berger and Fourquaux and a p-adic regulator map whose construction relies on the theory of Kisin–Ren modules generalizing the concept of Wach modules to the Lubin–Tate situation.

Keywords. p-adic Hodge theory, explicit reciprocity law, Coates–Wiles homomorphisms, big exponential maps, regulator maps, Lubin–Tate formal groups, ramified Witt vectors, character varieties, Serre duality, Stein spaces, Wach modules, Robba ring, distribution algebras, Mellin transform, Iwasawa cohomology, Iwasawa pairing, local Tate-duality, analytic cohomology

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