

Lambda-adic Barsotti–Tate groups and its p -divisible subgroups

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Abstract

I introduce a notion of ordinary Lambda-adic BT-groups and state a conjecture which describes when a p -divisible subgroup of finite corank is a usual BT-group over the p -adic integer ring of a finite extension of the p -adic field. Here Lambda is the usual Iwasawa algebra. When the Barsotti–Tate group is associated to a p -adic analytic family of ordinary modular forms, we can prove many cases of the conjecture.