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P-adic periods and p-adic subgroup theorem for 1-motives

We define a countable space of p-adic periods of 1-motives with good reduction using the crystalline-de Rham comparison isomorphism and we state a p-adic period conjecture that is analogous to the classical periods. To define these periods, we need to find a "suitable" Betti-like $\bar{\mathbb{Q}}$-structure inside the crystalline realisation. We show that these periods come from p-adic integration theory that we developed for 1-motives with good reduction from the classical Fontaine-Messing p-adic integration theory. Also, we prove the p-adic subgroup theorem for 1-motive that similar to classical periods it implies that the p-adic period conjecture holds for 1-motives with good reduction.