

On the Grunwald problem for regular Galois groups over \mathbb{Q}

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Let G be a finite group. Given a finite set S of prime numbers and, for each $p \in S$, a Galois extension F_p/\mathbb{Q}_p with Galois group embedding into G , the Grunwald problem asks whether there exists a Galois extension of \mathbb{Q} with Galois group G which approximates the local extensions F_p/\mathbb{Q}_p ($p \in S$). We investigate to what extent the set of specializations of a given regular Galois extension of $\mathbb{Q}(T)$ with Galois group G can provide answers to this question.