

## Exposé court

### **11** *Effective norm-form equations and an application to approximation by algebraic numbers*

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While effective resolution of Thue equations has been well-understood since the work of Baker in the 1960s, the effective resolution of a general norm-form equation in more than two variables remains an open problem. We will discuss some methods that apply to norm-forms arising from totally complex fields; in particular we completely settle the case of norm-form equations over totally complex Galois sextic fields. A strengthening of these results (proven in joint work with Yann Bugeaud) also gives rise to the first effective improvements on the Liouville inequality for the question of approximating complex algebraic numbers by quadratic, cubic and quartic irrationals.