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Non-abelian Chabauty on higher genus curves

The recent work of Minhyong Kim marked the start of an exciting programme in search of effective versions of Diophantine finiteness theorems. We review some recent results of Dogra on rational points on certain classes of higher genus curves which go beyond the range of applicability of Chabauty's method, and discuss work in progress on effective versions of Faltings' theorem for curves whose Jacobians are simple and have real multiplication.