Effective Siegel’s theorem for Modular Curves.

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Abstract: The celebrated theorem of Siegel ensures the finiteness of integral points on many classes of algebraic curves. This result is not effective for actually determining the integral points, that is, it does not produce any bound for their size. Siegel’s theorem has nonetheless been made effective for certain classes of curves. In a recent work with Yu. Bilu some results were applied to the case of modular curves, proving effectiveness for any modular curve of level not dividing a certain number.