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The Bogomolov conjecture for abelian varieties

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This conjecture is one of the finiteness results in Diophantine geometry that have been proved in the 80's and 90's, together with the Mordell and Manin-Mumford conjectures. Let V be an algebraic curve over a number field, of genus $g \geq 2$. It is possible to embed V in its Jacobian, which is an algebraic group of dimension g equipped with a canonical height. The Bogomolov conjecture says that for epsilon small enough, there are only a finite number of algebraic points of V with height less than epsilon. I will give generalisations of this conjecture that have already been proved, and explain how Diophantine approximation techniques allow to find estimates for the optimal epsilon.
