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The Galois case of the elliptic Lehler problem

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I will explain what is known about the points of small Néron-Tate height on elliptic curves (or more generally abelian varieties) and explain how to solve the Galois case of the elliptic Lehmer problem - the analog of a theorem of Amoroso and David in the number field setting. The proof uses Masser's counting theorem on points of small height, together with Kummer theory and estimates on the rank of the group generated by the set of conjugates of a point of small height. This is joint work with V. Mahé.