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Lattices with exponentially large kissing numbers

The quality of a lattice $L \subset \mathbb{R}^n$, considered as a sphere packing can be measured by its density and/or its kissing number. For $n \rightarrow \infty$ the classical Minkowski theorem implies the existence of lattice families with density behaving as $O(2^{-n})$. However, that classical method does not permit to construct lattices with exponentially large (in n) kissing numbers, and their existence was not known until very recently. I will explain how to construct such lattice families using rather roundabout way through coding theory and algebraic geometry.