

PICARD GROUPS OF MODULI PROBLEMS, REVISITED

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In an influential paper in 1963, Mumford discussed Picard groups of moduli problems, illustrated by explicit computations for the moduli of elliptic curves over a field of characteristic not 2 or 3. This paper anticipated ideas that were later realized by the notion of stacks. Four decades later, computing such Picard groups remains a good introduction to stacks. We illustrate this by computing the Picard group of elliptic curves over more general bases.