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Lattice QCD calculations of weak matrix elements¹

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Lattice QCD has become the method of choice for calculating the hadronic environment of the electroweak interactions of quarks. So it is now an essential tool in the search for new physics beyond the Standard Model. Advances in computing power and algorithms have resulted in increasingly precise predictions and increasingly stringent tests of the Standard Model. I review results of recent calculations of weak matrix elements and discuss their implications for new physics.

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