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# Theoretical uncertainties in the W-boson mass determination at hadron colliders

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The high-precision measurement of the W-boson mass (MW) offers the possibility of a stringent test of the Standard Model of the electroweak and strong interactions. The uncertainty of the current world average for MW is 0.2 per mille and the ATLAS and CMS collaborations at CERN are planning to measure MW reaching a final error of 15 MeV or eventually 10 MeV: such a precision requires a careful assessment of the theoretical systematics affecting the W-boson mass measurement at hadron colliders. The main sources of theoretical uncertainties are discussed focusing in particular on the electroweak and mixed QCD-electroweak effects.

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## Abstract Title

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