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Titolo	Jet Physics at the LHC : The Strong Force beyond the TeV Scale // by Klaus Rabbertz
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Descrizione fisica	1 online resource (XV, 214 p. 112 illus., 98 illus. in color.)
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Soggetti	Elementary particles (Physics) Quantum field theory Particle acceleration Elementary Particles, Quantum Field Theory Particle Acceleration and Detection, Beam Physics
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Theoretical Framework -- Jet Measurement -- Absolute Cross Sections.-Cross Section Ratios -- Normalised Cross Sections -- Future Perspectives -- Summary and Outlook.
Sommario/riassunto	This book reviews the latest experimental results on jet physics from proton-proton collisions at the LHC. Jets allow to determine the strong coupling constant over a wide range of energies up the highest ones possible so far, and to constrain the gluon parton distribution of the proton, both of which are important uncertainties on theory predictions in general and for the Higgs boson in particular. A novel approach in this book is to categorize the examined quantities according to the types of absolute, ratio, or shape measurements and to explain in detail the advantages and differences. Including numerous illustrations and tables the physics message and impact of each observable is clearly elaborated.