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Titolo	Electroweak Physics at the LHC [[electronic resource] /] / by Matthias U. Mozer
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Descrizione fisica	1 online resource (IX, 115 p. 43 illus., 35 illus. in color.)
Collana	Springer Tracts in Modern Physics, , 0081-3869 ; ; 267
Disciplina	539.7544
Soggetti	Elementary particles (Physics) Quantum field theory Nuclear physics Heavy ions Particle acceleration Elementary Particles, Quantum Field Theory Nuclear Physics, Heavy Ions, Hadrons Particle Acceleration and Detection, Beam Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Theory overview -- Experimental Signatures of EWK Bosons -- EWK Bosons and QCD -- Electroweak Parameters -- EWK Bosons and the Higgs Boson -- Diboson Resonances -- Nonresonant Multi-Boson Production -- Conclusion.
Sommario/riassunto	The book discusses the recent experimental results obtained at the LHC that involve electroweak bosons. The results are placed into an appropriate theoretical and historical context. The work pays special attention to the rising subject of hadronically decaying bosons with high boosts, documenting the state-of-the-art identification techniques and highlighting example results their application. The document is not limited to electroweak physics in the strict sense, but also discusses the use of electroweak vector-bosons as tool in the study of other subjects in particle physics, such as determinations of the proton structure or the search for new exotic particles. The book is particularly well suited for graduate students, starting their thesis work

on topics that involve electroweak bosons, as the book provides a comprehensive description of phenomena observable at current accelerators as well as a summary of the most relevant experimental techniques.
