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Collana	Lecture Notes in Physics, , 0075-8450 ; ; 247
Disciplina	530.8
Soggetti	Physical measurements Measurement Elementary particles (Physics) Quantum field theory Measurement Science and Instrumentation Elementary Particles, Quantum Field Theory
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Opening address considerations on the statistical description of charged-beam plasmas -- Integrable and nonintegrable hamiltonian systems -- Single particle dynamics and nonlinear resonances in circular accelerators -- Nonlinear dynamics aspects of modern storage rings -- Nonlinear beam-beam resonances -- Synchro-betatron resonances -- Observations of the beam-beam interaction -- The dynamics of the beam-beam interaction -- Review of beam-beam simulations -- Perturbation methods in nonlinear dynamics -- Theories of statistical equilibrium in electron-positron colliding-beam storage rings -- Non-linear dissipative phenomena in electron storage rings -- Dynamic aperture: Analytic derivation and sextupole algorithms -- Transition to chaos for area-preserving maps -- Tracking and special processors -- Algorithms for tracking of charged particles in circular accelerators -- Break-down of stability -- Nonlinear dynamics a

personal perspective.
