1.	Record Nr.	UNISALENTO991003598659707536
	Autore	Schwartz, Matthew Dean
	Titolo	Quantum field theory and the standard model / Matthew D. Schwartz
	ISBN	9781107034730 (hardback)
	Descrizione fisica	xviii, 850 pages : illustrations ; 26 cm
	Classificazione	LC QC174.45
	Disciplina	530.14/3
	Soggetti	Quantum field theory - Textbooks
		Particles (Nuclear physics) - Textbooks
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references (pages 834-841) and index
	Nota di contenuto	Machine generated contents note: Part I. Field Theory: 1. Microscopic theory of radiation; 2. Lorentz invariance and second quantization; 3. Classical Field Theory; 4. Old-fashioned perturbation theory; 5. Cross sections and decay rates; 6. The S-matrix and time-ordered products; 7. Feynman rules; Part II. Quantum Electrodynamics: 8. Spin 1 and gauge invariance; 9. Scalar QED; 10. Spinors; 11. Spinor solutions and CPT; 12. Spin and statistics; 13. Quantum electrodynamics; 14. Path integrals; Part III. Renormalization: 15. The Casimir effect; 16. Vacuum polarization; 17. The anomalous magnetic moment; 18. Mass renormalization; 19. Renormalized perturbation theory; 20. Infrared divergences; 21. Renormalizability; 22. Non-renormalizable theories; 23. The renormalization group; 24. Implications of Unitarity; Part IV. The Standard Model: 25. Yang-Mills theory; 26. Quantum Yang-Mills theory; 27. Gluon scattering and the spinor-helicity formalism; 28. Spontaneous symmetry breaking; 29. Weak interactions; 30. Anomalies; 31. Precision tests of the standard model; 32. QCD and the parton model; Part V. Advanced Topics: 33. Effective actions and Schwinger proper time; 34. Background fields; 35. Heavy-quark physics; 36. Jets and effective field theory; Appendices; References; Index.