1. Record Nr. UNISALENTO991003433599707536

Autore	Harris, John
Titolo	English Sound : Structure / John Harris
Pubbl/distr/stampa	Oxford-Cambridge : Blackwell, c1994
ISBN	0631187413
Descrizione fisica	VIII, 315 p. ; 23 cm
Soggetti	Teoria degli elementi Fonologia - Teoria fonologica
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes bibliographical references and index

2. Record Nr. UNINA9910765490703321

Autore	Liu Zheng-Hao
Titolo	Exploring Quantum Contextuality with Photons / / by Zheng-Hao Liu
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-9961-67-X
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (170 pages)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5061
Disciplina	530.12 003.54
Soggetti	Quantum computing Quantum entanglement Quantum theory Computer simulation Mathematical physics Optics Angular momentum Quantum Information Quantum Correlation and Entanglement Quantum Simulations Fundamental concepts and interpretations of QM Mathematical Methods in Physics Angular momentum of light

Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- The Theory of Quantum Contextuality -- Quantum Information with Linear Optics -- Experimental Study of Contextuality Beyond Nonlocality -- All-Versus-Nothing Paradoxes in Quantum Contextuality -- Contextuality in the Pre-Postselecting Paradoxes.
Sommario/riassunto	This thesis highlights research explorations in quantum contextuality with photons. Quantum contextuality is one of the most intriguing and peculiar predictions of quantum mechanics. It is also a cornerstone in modern quantum information science. It is the origin of the famous quantum nonlocality and various nonclassical paradoxes. It is also a resource for many quantum information processing tasks and even universal quantum computing. Therefore, the study of quantum contextuality not only advances the comprehension of the foundations of quantum physics, but also facilitates the practical applications of quantum information technology. In the last fifteen years, the study of quantum contextuality has developed from a purely theoretical level to a stage where direct experimental tests become amenable. However, the experimental research on contextuality at the current stage largely focuses on direct validations of some most famous predictions of contextuality, while other forms of contextuality and its practical applications in quantum information science are rarely involved. The research in this thesis is committed to bridge this gap from two directions: (1) to construct and test stronger forms of contextuality and relieve the requirements of contextuality experiments on experimental platforms, and (2) to explore the connections between contextuality and the other concepts in quantum information science and directly demonstrate the application of contextuality in broader scenarios. Specifically, the thesis have discussed the research topics about the relationship between quantum contextuality and nonlocality, the “all-versus-nothing” paradoxes from quantum contextuality, the ore- and post-selection paradoxes from quantum contextuality, and the topological protection and braiding dynamics of quantum contextuality in quasiparticle systems.