

1. Record Nr.	UNINA9910787695303321
Autore	Henley Ernest M.
Titolo	100 years of subatomic physics // Ernest M. Henley, Stephen D. Ellis, University of Washington, USA
Pubbl/distr/stampa	New Jersey : , : World Scientific, , [2013] 2013
ISBN	9789814425827 981-4425-81-8
Descrizione fisica	1 online resource (viii, 550 pages) : illustrations (some color)
Collana	Gale eBooks
Disciplina	539.72
Soggetti	Particles (Nuclear physics) - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part: Nuclear physics -- 1. Particle Physics, From Rutherford to the LHC S. Level 2. The Early Years and Beyond E. M. Henley and A. Garcia -- 3. 100 Years of Nuclear Mass Measurements and Models G. T. Garvey -- 4. Symmetries and Dynamical Symmetries in Nuclei I. Talmi -- 5. Nuclear Fission R. Vogt and J. Randrup -- 6. Parity- and Time-Reversal Tests in Nuclear Physics D. Hertzog and M. J. Ramsey-Musolf -- 7. High Energy Nuclear Physics: From Bear Mountain to the LHC L. McLerran -- 8. Chiral Symmetry in Subatomic Physics U.-G. Meibner -- 9. Exotic Nuclei Far From the Stability Line K. Hagino, I. Tanihata and H. Sagawa Part: 2. Particle physics -- 10. A Short History of Colliders L. Evans -- 11. 4 Detectors C. Tully -- 12. Large Underground Detectors for Proton Decay and Neutrino Physics K. Scholberg -- 13. Jets and QCD S. D. Ellis and D. E. Soper -- 14. Diffractive Phenomena in High Energy Processes L. Frankfurt and M. Strikman 15. Weak Interactions: From Current-Current to Standard Model and Beyond R. N. Mohapatra -- 16. Neutrino Physics L. Wolfenstein -- 17. Introduction to Renormalization in Field Theory L.-F. Li --18. Lattice Gauge Theory and the Origin of Mass A. S. Kronfeld -- 19. String Theory and M-Theory J. H. Schwarz.
Sommario/riassunto	By year 1911 radioactivity had been discovered for over a decade, but its origin remained a mystery. Rutherford's discovery of the nucleus and the subsequent discovery of the neutron by Chadwick started the

field of subatomic physics — a quest for understanding the fundamental constituents of matter. This book reviews the important achievements in subatomic physics in the past century. The chapters are divided into two parts: nuclear physics and particle physics. Written by renowned authors who have made major developments in the field, this book provides the academics and researchers an essential overview of the present state of knowledge in nuclear and particle physics.

2. Record Nr.	UNINA9910847589903321
Autore	Atanasova Pepa
Titolo	Accountable and Explainable Methods for Complex Reasoning over Text // by Pepa Atanasova
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-51518-8
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (208 pages)
Disciplina	006.31
Soggetti	Natural language processing (Computer science) Information storage and retrieval systems Machine learning Natural Language Processing (NLP) Information Storage and Retrieval Machine Learning Aprenentatge automàtic Tractament del llenguatge natural (Informàtica) Sistemes d'informació Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Executive Summary -- Part I: Accountability for Complex Reasoning Tasks over Text -- 2. Fact Checking with Insufficient Evidence -- 3. Generating Label Cohesive and Well-Formed Adversarial Claims -- Part II: Explainability for Complex Reasoning Tasks over Text -- 4. Generating Fact Checking Explanations -- 5. Generating Fluent Fact

Checking Explanations with Unsupervised Post-Editing -- 6. Multi-Hop Fact Checking of Political Claims -- Part III: Diagnostic Explainability Methods -- 7. A Diagnostic Study of Explainability Techniques for Text Classification -- 8. Diagnostics-Guided Explanation Generation -- 9. Recent Developments on Accountability and Explainability for Complex Reasoning Tasks.

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Sommario/riassunto

This thesis presents research that expands the collective knowledge in the areas of accountability and transparency of machine learning (ML) models developed for complex reasoning tasks over text. In particular, the presented results facilitate the analysis of the reasons behind the outputs of ML models and assist in detecting and correcting for potential harms. It presents two new methods for accountable ML models; advances the state of the art with methods generating textual explanations that are further improved to be fluent, easy to read, and to contain logically connected multi-chain arguments; and makes substantial contributions in the area of diagnostics for explainability approaches. All results are empirically tested on complex reasoning tasks over text, including fact checking, question answering, and natural language inference. This book is a revised version of the PhD dissertation written by the author to receive her PhD from the Faculty of Science, University of Copenhagen, Denmark. In 2023, it won the Informatics Europe Best Dissertation Award, granted to the most outstanding European PhD thesis in the field of computer science.

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