1. Record Nr. UNISA996503462203316

Autore	Gouttenoire Yann
Titolo	Beyond the standard model cocktail : a modern and comprehensive review of the major open puzzles in theoretical particle physics and cosmology with a focus on heavy dark matter / / Yann Gouttenoire
Pubbl/distr/stampa	Cham, Switzerland : , : Springer Nature Switzerland AG, , [2022] ©2022
ISBN	9783031118623 9783031118616
Descrizione fisica	1 online resource (534 pages)
Collana	Springer Theses Series
Disciplina	539.72
Soggetti	Cosmology Particles (Nuclear physics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Intro -- Supervisors' Foreword -- Abstract -- Publications Related to This Thesis -- Acknowledgements -- Contents -- About the Author -- 1 Introduction -- References -- 2 Standard Model of Elementary Particles -- 2.1 Fields and Symmetries -- 2.1.1 The Lorentz Representations -- 2.1.2 The Gauge Interactions -- 2.1.3 The Matter Content -- 2.1.4 The Higgs Field -- 2.2 The Standard Model in a Nutshell -- 2.2.1 The Lagrangian -- 2.2.2 Quantum Chromodynamics -- 2.2.3 Electroweak Symmetry Breaking -- 2.2.4 Weak CP Violation -- 2.2.5 Anomaly Cancellation -- 2.2.6 Strong CP Violation -- 2.3 Open Problems -- 2.3.1 Hierarchy Problem -- 2.3.2 Neutrino Oscillations -- 2.3.3 Flavor Hierarchy Problem -- 2.3.4 Strong CP Problem -- References -- 3 Standard Model of Cosmology -- 3.1 The normal upper LamdaCDM Cosmological Model -- 3.1.1 A Homogeneous and Isotropic Expanding Universe -- 3.1.2 Energy Content of the Universe -- 3.2 The Hot Big-Bang Scenario -- 3.2.1 Thermal Equilibrium -- 3.2.2 Beyond Thermal Equilibrium -- 3.3 Inflation -- 3.3.1 The Homogeneity Problem -- 3.3.2 The Flatness Problem -- 3.3.3 The Solution: Shrinking the Comoving Hubble Radius -- 3.3.4 Slow-Roll Inflation -- 3.4 Gravitational Waves of Primordial Origin -- 3.4.1 Linearized Wave Solutions of Einstein Equations -- 3.4.2 Energy of

Bubble Wall Velocities -- 7.5.1 LO Pressure -- 7.5.2 NLO Pressure -- 7.5.3 Ping-Pong Regime -- 7.6 Amount of Supercooling Needed for Our Picture to Be Relevant -- 7.7 Ejected Quarks and Gluons -- 7.7.1 Density of Ejected Techniquanta -- 7.7.2 Scatterings of Ejected Quarks and Gluons Before Reaching Other Bubbles -- 7.7.3 Ejected Techniquanta Enter Other Bubbles (and Their Pressure on Them) -- 7.7.4 Ejected Techniquanta Heat the Diluted SM Bath.
7.8 Deep Inelastic Scattering in the Early Universe -- 7.8.1 Scatterings Before (P)reheating -- 7.8.2 Scatterings with the (P)reheated Bath -- 7.8.3 Enhancement of Hadron Abundance Via DIS -- 7.8.4 DIS Summary -- 7.9 Supercooled Composite Dark Matter -- 7.9.1 Initial Condition for Thermal Evolution -- 7.9.2 Thermal Contribution -- 7.9.3 Dark Matter Relic Abundance -- 7.10 Discussion and Outlook -- 7.A Wall Profile of the Expanding Bubbles -- 7.A.1 The Light-Dilaton Potential -- 7.A.2 The Wall Profile -- 7.B Example Estimates of the String to DM Branching Ratio -- 7.B.1 Light Meson-Combinatorics -- 7. B.2 Heavy Baryon-Boltzmann Suppression -- References -- 8 Gravitational Waves from Cosmic Strings -- 8.1 Introduction -- 8.2 Recap on Cosmic Strings -- 8.2.1 Microscopic Origin of Cosmic Strings -- 8.2.2 Cosmic-String Network Formation and Evolution -- 8.2.3 Decay Channels of Cosmic Strings -- 8.2.4 Constraints on the String Tension upper G muG μ from GW Emission -- 8.3 Gravitational Waves from Cosmic Strings -- 8.3.1 Beyond the Nambu-Goto Approximation -- 8.3.2 Assumptions on the Loop Distribution -- 8.3.3 The Gravitational-Wave Spectrum -- 8.3.4 The Frequency-Temperature Relation -- 8.3.5 The Astrophysical Foreground -- 8.4 The Velocity-Dependent One-Scale Model -- 8.4.1 The Loop-Production Efficiency -- 8.4.2 The VOS Equations -- 8.4.3 Scaling Regime Solution and Beyond -- 8.5 Standard Cosmology -- 8.5.1 The Cosmic Expansion -- 8.5.2 Gravitational Wave Spectrum -- 8.5.3 Deviation from the Scaling Regime -- 8.5.4 Beyond the Nambu-Goto Approximation -- 8.6 Intermediate Matter Era -- 8.6.1 The Non-standard Scenario -- 8.6.2 Impact on the Spectrum -- 8.6.3 Constraints -- 8.7 Intermediate Inflation -- 8.7.1 The Non-standard Scenario -- 8.7.2 The Stretching Regime and Its Impact on the Spectrum -- 8.7.3 Model-Independent Constraints.
8.8 Summary and Conclusion -- 8.A Constraints on Cosmic Strings from BBN, Gravitational … -- 8.A.1 GW Constraints from BBN -- 8.A.2 Gravitational Lensing -- 8.A.3 Temperature Anisotropies in the CMB -- 8.A.4 Non-gravitational Radiation -- 8.B Derivation of the GW Spectrum from CS -- 8.B.1 From GW Emission to Detection -- 8.B.2 From Loop Production to GW Emission -- 8.B.3 The Loop Production -- 8.B.4 The Master Equation -- 8.B.5 The GW Spectrum from the Quadrupole Formula -- 8.B.6 Impact of the High-Frequency Proper Modes of the Loop -- 8.C Derivation of the Frequency-Temperature Relation -- 8.C.1 In Standard Cosmology -- 8.C.2 During a Change of Cosmology -- 8.C. 3 In the Presence of an Intermediate Inflation Period -- 8.C.4 Cut-Off from Particle Production -- 8.D Derivation of the VOS Equations -- 8.D. 1 The Nambu-Goto String in an Expanding Universe -- 8.D.2 The Long-String Network -- 8.D.3 VOS 1: The Correlation Length -- 8.D.4 Thermal Friction -- 8.D.5 VOS 2: The Mean Velocity -- 8.E Extension of the Original VOS Model -- 8.E.1 VOS Model from Nambu-Goto Simulations -- 8.E.2 VOS Model from Abelian-Higgs Simulations -- 8.E. 3 VOS Model from Abelian-Higgs Simulations with Particle Production -- 8.F GW Spectrum from Global Strings -- 8.F.1 The Presence of a Massless Mode -- 8.F.2 Evolution of the Global Network -- 8.F.3 The GW Spectrum -- 8.F.4 Global Versus Local Strings -- 8.F.5 As a Probe of Non-standard Cosmology -- References -- 9 Probe Heavy DM with

	GW from CS -- 9.1 The Imprints of an Early Era of Matter Domination -- 9.1.1 Modified Spectral Index -- 9.1.2 How to Detect a Matter Era with a GW Interferometer -- 9.1.3 Model-Independent Constraints on Particle Physics Parameters -- 9.1.4 Heavy Dark Photons -- 9.2 Supercooled Composite Dark Matter -- 9.3 Summary -- References -- 10 Conclusion -- References.

2. Record Nr. UNINA9910956352103321

Titolo	The new left revisited / / edited by John McMillian and Paul Buhle
Pubbl/distr/stampa	Philadelphia, PA, : Temple University Press, c2003
ISBN	9786612272233 9781282272231 1282272233 9781592137978 1592137970
Edizione	[1st ed.]
Descrizione fisica	1 online resource (281 p.)
Collana	Critical perspectives on the past
Altri autori (Persone)	McMillianJohn Campbell BuhlePaul <1944->
Disciplina	303.48/4
Soggetti	New Left - United States Radicalism - United States United States Social conditions 1960-1980
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	Contents; Introduction "You Didn't Have to Be There": Revisiting the New Left Consensus; PART I Local Studies, Local Stories; Chapter 1: "It Seemed a Very Local Affair": The Student Movement at Southern Illinois University at Carbondale; Chapter 2: Between Despair and Hope: Revisiting Studies on the Left; Chapter 3: Building the New South: The Southern Student Organizing Committee; Chapter 4: The Black Freedom Struggle and White Resistance: A Case Study of the Civil Rights Movement in Cambridge, Maryland Chapter 5: Organizing from the Bottom Up: Lillian Craig, Dovie Thurman, and the Politics of ERAP Chapter 6: Death City Radicals: The

Counterculture in Los Angeles; PART I I Reconsiderations; Chapter 7: How New Was the New Left?; Chapter 8: Strategy and Democracy in the New Left; Chapter 9: The "Point of Ultimate Indignity" or a "Beloved Community"? The Draft Resistance Movement and Gender Dynamics; Chapter 10: Losing Our Kids: Queer Perspectives on the Chicago Seven Conspiracy Trial
Chapter 11: Between Revolution 9 and Thesis 11: Or, Will We Learn (Again) to Start Worrying and Change the World? Chapter 12: Letting Go: Revisiting the New Left's Demise; Afterword: How Sweet It Wasn't: The Scholars and the CIA; About the Contributors

Sommario/riassunto

Starting with the premise that it is possible to say something significantly new about the 1960's and the New Left, the contributors to this volume trace the social roots, the various paths, and the legacies of the movement that set out to change America. As members of a younger generation of scholars, none of them (apart from Paul Buhle) has first-hand knowledge of the era. Their perspective as non-participants enables them to offer fresh interpretations of the regional and ideological differences that have been obscured in the standard histories and memoirs of the period. Reflecting the diver...