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ANISOTROPY; 1 Introduction; 2 CMB distortion from winds; 2.1 Modelling the ensemble of galactic outflows; 2.2 Distortion of the CMB background; 3 Results and discussions; Acknowledgments; References; DETERMINATION OF THE COSMOLOGICAL PARAMETERS USING THE CMB RADIATION; 1 The  $H_0$  -  $t_0$  and  $H_0$  -  $\Omega_m$  diagrams; References; BIG BANG NUCLEOSYNTHESIS; 1 Introduction; 2 Data; 2.1  $^4\text{He}$ ; 2.2  $^7\text{Li}$ ; 3 Concordance; Acknowledgments; References; BIG-BANG NUCLEOSYNTHESIS WITH THE NACRE COMPILATION References; ISSUES IN NON-STANDARD BIG BANG NUCLEOSYNTHESIS; Acknowledgments; References; LEPTON ASYMMETRIC UNIVERSE: NEW LIMITS FROM BBN AND THE CMB; Part 2. Origin and Evolution of the Light Elements; D / H MEASUREMENTS; 1 Introduction; 2 Interstellar observations; 3 The nearby ISM; 4 The FUSE observatory; 5 Conclusion; Acknowledgments; References; A NEW MEASUREMENT OF THE PRIMORDIAL D / H RATIO IN THE INTERGALACTIC MEDIUM: HS 0105+1619; 1 Introduction; 2 HS 0105+1619; 2.1 The Hydrogen; 2.2 The Deuterium; 2.3 Metal Lines; 3 New Values for D/H & Cosmological Parameters; Acknowledgments References; A D / H measurement in the damped Ly $\alpha$  system at  $z_{abs} = 3.025$  towards QSO 0347-3819; 1 Introduction; References; DEUTERIUM NEAR AND FAR IN THE GALAXY; THE OBSERVATIONAL DETERMINATION OF THE PRIMORDIAL HELIUM ABUNDANCE: A Y2K STATUS REPORT; 1 Background; 2 Recent Progress; 3 Current Concerns; 4 Forward Look; Acknowledgments; References; THE ORIGIN AND EVOLUTION OF  $^3\text{He}$ ; 1 Prolog; 2 Status of the Observational Program; 3 Summary; Acknowledgments; References; GALACTIC EVOLUTION OF D AND  $^3\text{He}$ ; 1 D and  $^3\text{He}$  one year later; Acknowledgements; References; THE ENIGMA OF  $^3\text{He}$ ; References; LI / H MEASUREMENTS IN STARS; 1 Lithium in very young stars; 2 Lithium in evolved stars; 3 Lithium in halo stars; 4 The connection with cosmology: abundance of Li in the ISM at the birth of the star; 5 conclusion; References; ASTROPHYSICAL RELEVANCE OF HOT BOTTOMBURNING IN AGB; 1 Introduction; 2 Our recent studies on HBB - AGB stars; 3 ON cycling in HBB and the self-pollution model for GCs; References; LITHIUM ISOTOPE RATIOS IN METAL-POOR HALO STARS; 1 Introduction; 2 Observations and Analysis; 3 Preliminary Results; References; LITHIUM ALONG THE AGB OF LMC CLUSTERS; 1 The AGB stars of NGC 1866 References

## Sommario/riassunto

This is the proceedings of an international conference on the evolution of matter in the Universe, with emphasis on the following topics: big bang nucleosynthesis, cosmic ray nucleosynthesis, stellar nucleosynthesis, galactic chemical and dynamical evolution, and evolution with redshift and cosmic chemical evolution in general.