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Nota di contenuto	Stellar Populations; Contents; Preface; Abbreviations and Acronyms; Color Plates; 1 Firm and Less Firm Outcomes of Stellar Evolution Theory; 1.1 A Brief Journey through Stellar Evolution; 1.1.1 A 9 M Star; 1.1.2 The Evolution of Stars with Solar Composition; 1.1.3 Dependence on Initial Chemical Composition; 1.1.4 The Asymptotic Giant Branch Phase; 1.2 Strengths and Weaknesses of Stellar Evolutionary Models; 1.2.1 Microphysics; 1.2.2 Macrophysics; 1.3 The Initial Mass-Final Mass Relation; 2 The Fundamentals of Evolutionary Population Synthesis; 2.1 The Stellar Evolution Clock 2.2 The Evolutionary Flux 2.3 The Fuel Consumption Theorem; 2.4 Fuel Consumptions; 2.5 Population Synthesis Using Isochrones; 2.6 The Luminosity Evolution of Stellar Populations; 2.7 The Specific Evolutionary Flux; 2.8 The IMF Scale Factor; 2.9 Total and Specific Rates of Mass Return; 2.10 Mass and Mass-to-Light Ratio; 2.11 IMF-Dependent and IMF-Independent Quantities; 2.12 The Age-Metallicity Degeneracy; 3 Resolving Stellar Populations; 3.1 The Stellar Populations of Pixels and Frames; 3.1.1 The Stellar Population of a Frame; 3.1.2 The Stellar Population of a Pixel

3.2 Simulated Observations and Their Reduction
4 Age Dating Resolved Stellar Populations; 4.1 Globular Cluster Ages; 4.1.1 Absolute and Relative Globular Cluster Ages; 4.1.2 Globular Clusters with Multiple Populations; 4.2 The Age of the Galactic Bulge; 4.3 Globular Clusters in the Magellanic Clouds; 4.4 Stellar Ages of the M31 Spheroid; 4.4.1 The Bulge of M31; 4.4.2 The M31 Halo and Giant Stream; 4.5 The Star Formation Histories of Resolved Galaxies; 4.5.1 The Mass-Specific Production; 4.5.2 Decoding the CMD; 4.5.3 The Specific Production Method; 4.5.4 The Synthetic CMD Method
4.5.5 An Example: the Stellar Population in the Halo of the Centaurus A Galaxy
5 The Evolutionary Synthesis of Stellar Populations; 5.1 Simple Stellar Populations; 5.2 Spectral Libraries; 5.2.1 Empirical Spectral Libraries; 5.2.2 Model Atmosphere Libraries; 5.3 Composite Stellar Populations; 5.4 Evolving Spectra; 5.4.1 The Spectral Evolution of a SSP; 5.4.2 The Spectral Evolution of Composite Stellar Populations; 5.4.3 There Are Also Binaries; 6 Stellar Population Diagnostics of Galaxies; 6.1 Measuring Star Formation Rates; 6.1.1 The SFR from the Ultraviolet Continuum
6.1.2 The SFR from the Far-Infrared Luminosity
6.1.3 The SFR from Optical Emission Lines; 6.1.4 The SFR from the Soft X-ray Luminosity; 6.1.5 The SFR from the Radio Luminosity; 6.2 Measuring the Stellar Mass of Galaxies; 6.3 Age and Metallicity Diagnostics; 6.3.1 Star-Forming Galaxies; 6.3.2 Quenched Galaxies; 6.4 Star-Forming and Quenched Galaxies through Cosmic Times; 6.4.1 The Main Sequence of Star-Forming Galaxies; 6.4.2 The Mass and Environment of Quenched Galaxies; 6.4.3 Mass Functions; 7 Supernovae; 7.1 Observed SN Rates; 7.2 Core Collapse SNe; 7.2.1 Theoretical Rates
7.2.2 Nucleosynthetic Yields

Sommario/riassunto

This up-to-date reference on stellar populations and development models includes coverage of distant galaxies, chemical evolution and supernovae. Written by highly acclaimed authorities in the field, the book makes use of specific problems to reveal the "kitchen secrets."
