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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  
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7.2.2 Nucleosynthetic Yields

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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."

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