

Table of Contents

Introduction	
<i>Kurt W. Weiler</i>	1
<hr/>	
Part I Supernovae	
<hr/>	
Historical Supernovae	
<i>David A. Green, F. Richard Stephenson</i>	7
Classification of Supernovae	
<i>Massimo Turatto</i>	21
Supernova Rates	
<i>Enrico Cappellaro</i>	37
Optical Spectra of Supernovae	
<i>David Branch, Edward A. Baron, David J. Jeffery</i>	47
Optical Light Curves of Supernovae	
<i>Bruno Leibundgut, Nicholas B. Suntzeff</i>	77
X-Ray Supernovae	
<i>Stefan Immler, Walter H.G. Lewin</i>	91
Ultraviolet Supernovae	
<i>Nino Panagia</i>	113
Radio Supernovae	
<i>Richard A. Sramek, Kurt W. Weiler</i>	145
Supernova Interaction with a Circumstellar Medium	
<i>Roger A. Chevalier, Claes Fransson</i>	171
Measuring Cosmology with Supernovae	
<i>Saul Perlmutter, Brian P. Schmidt</i>	195
Supernova 1987A	
<i>Richard McCray</i>	219

Part II Supernovae to γ -Ray Bursters

SN1998bw and Hypernovae

Koichi Iwamoto, Ken'ichi Nomoto, Paolo A. Mazzali, Takayoshi Nakamura, Keiichi Maeda..... 243

Supernovae and γ -Ray Bursters

Titus J. Galama 283

Part III γ -Ray Bursters**Observational Properties
of Cosmic γ -Ray Bursts**

Kevin Hurley 301

X-Ray Observations of γ -Ray Burst Afterglows

Filippo Frontera 317

Optical Observations of γ -Ray Burst Afterglows

Elena Pian 343

Radio Observations of γ -Ray Burst Afterglows

Kurt W. Weiler, Nino Panagia, Marcos J. Montes 367

Gamma-Ray Bursts: The Underlying Model

Eli Waxman..... 393

**Ambient Interaction Models
for γ -Ray Burst Afterglows**

Zhi-Yun Li, Roger A. Chevalier 419

Cosmological Studies with γ -Ray Bursts

Abraham Loeb 445

Subject Index 457