
Contents

The Rest-Frame UV Spectrum of Elliptical Galaxies at High Redshift <i>Alvio Renzini</i>	1
Rest-Frame UV and Visible Properties of Early Type Galaxies at $1 < z < 2$. <i>Patrick McCarthy</i>	11
Effect of Reionization on High-z Stellar Populations <i>Daniel Babich</i>	19
Near UV Properties of Early-Type Galaxies at $z \sim 1$ <i>Sperello di Serego Alighieri and Alessandro Bressan</i>	25
High Redshift Simulations Using the GALEX Ultraviolet Images of Nearby Galaxies <i>Bum-Suk Yeom, Young Kwang Kim, Soo-Chang Rey, Young Hoon Joe and Armando Gil de Paz</i>	31
GALEX Studies of Early-type Galaxies: the UV Rising Flux and Residual Star Formation <i>Michael Rich</i>	35
UV Excess and AGB Evolution in Elliptical-Galaxy Stellar Populations <i>Rosa A. González-Lópezlira and Alberto Buzzoni</i>	51
Binary Stars as the Source of the Far-UV Excess in Elliptical Galaxies <i>Zhanwen Han, Philipp Podsiadlowski and Anthony E. Lynas-Gray</i>	59

Stellar Populations in Field Early-Type Galaxies

*F. Annibali, A. Bressan, R. Rampazzo, P. Panuzzo W. Zeilinger
and L. Danese* 67

**GALEX UV Observations of Elliptical Galaxies in Abell
Clusters at $z < 0.2$**

*Chang H. Ree, Young-Wook Lee, Sukyoung Yi, Suk-Jin Yoon
and the GALEX Science Team*..... 75

Near-UV Merger Signatures in Early-Type Galaxies

Jodie R. Martin, Robert W. O’Connell and John E. Hibbard..... 83

**The Chemical Composition of Elliptical Galaxies Through
Mid-UV Indices**

*G. Ramos-Larios, M. Chávez, J. Morales-Hernández,
F. Huerta-Villapando, L. Sierra, H. de la Rosa, A. Pérez-Grana,
E. Bertone and L. H. Rodríguez-Merino* 89

Colours of the Envelopes of cD Galaxies

*S. N. Kemp, V. Guzmán Jiménez, P. Ramírez Beraud, J. A. Pérez
Grana, V. H. Ramírez Siordia, and F. J. Hernández Ibarra*..... 93

**A Morphological Study of M81: Comparison Between GALEX
and Spitzer Imaging**

I. Puerari, R. A. González-Lópezlira and M. Valdez-Gutiérrez..... 99

**The Impact of Encounters on the Members of Local Group
Analogues. A View from GALEX**

*Lucio M. Buson, Daniela Bettoni, Luciana Bianchi, Alberto Buzzoni,
Antonietta Marino and Roberto Rampazzo*..... 105

**GALEX UV Spectroscopy of Extended Objects: The Case
of NGC 3079**

*Daniel Rosa González, Veronique Buat, Denis Burgarella,
Samuel Boissier, Alessandro Boselli and Armando Gil de Paz* 109

An Atlas of GALEX UV Spectra Selected from the CDFS

Martha Bello-Ramírez and Daniel Rosa-González 113

**Weak X-ray Galaxies in the Chandra Deep Field South:
Searching for an Early Stage of Star Formation**

*Jesús López-Hernández, Daniel Rosa-González, Elena Terlevich
and Roberto Terlevich* 117

UV Observations of Galactic Globular Clusters

Francesco R. Ferraro and Barbara Lanzoni 121

Globular Clusters with the Extended Horizontal-Branch as Remaining Cores of Galaxy Building Blocks <i>Young-Wook Lee, Hansung B. Gim and Chul Chung</i>	129
The Blue Straggler Star Radial Distribution: Clues on Formation Mechanisms <i>Barbara Lanzoni</i>	135
Infant Mortality of Star Clusters: on the Origin of the Diffuse UV Emission <i>Anne Pellerin, Martin J. Meyer, Jason Harris and Daniela Calzetti</i>	141
Are the Compact Star Clusters in M82 Evolving Towards Globular Clusters? <i>Y. D. Mayya, D. Rosa-González, L. H. Rodríguez-Merino, L. Carrasco, R. Romano and A. Luna</i>	147
NGC 4214: Cluster Properties Derived from Multi-band Photometry <i>Leonardo Úbeda, Jesús Maíz-Apellániz, and John W. MacKenty</i>	157
UV Spectroscopic Indices of Galactic Globular Clusters <i>Javier Morales-Hernández, Miguel Chávez, Emanuele Bertone, Alberto Buzzoni and Alessandro Bressan</i>	163
The Extended Emission of Ultracompact HII Regions: An Overview and New Observations <i>Eduardo de la Fuente, Stanley E. Kurtz, M. S. N. Kumar, José Franco, Alicia Porras, Simon N. Kemp and Alfredo Franco-Balderas</i>	167
Horizontal Branch Stars and the Ultraviolet Universe <i>M. Catelan</i>	175
Subdwarf B and O Stars: Which Evolutionary Pathways? <i>R. Napiwotzki</i>	191
Computing Solar Absolute Fluxes <i>Carlos Allende Prieto</i>	199
Recent Progress in Modeling Stellar Atmospheres <i>Ivan Hubeny and Thierry Lanz</i>	211
Ultraviolet Stellar and Cluster Spectra Compared to Theoretical Templates <i>Ruth C. Peterson</i>	223
A Novel Precise Method for Correcting the Temperature in Stellar Atmosphere Models <i>Octavio Cardona, Lucio Crivellari and Eduardo Simonneau</i>	231

New Model Atmospheres: Testing the Solar Spectrum in the UV

Lino H. Rodríguez-Merino, Octavio Cardona, Emanuele Bertone, Miguel Chávez and Alberto Buzzoni 239

Photoionization, Recombination, and Radiative Transitions of Atoms and Ions

Sultana N. Nahar 245

Recombination rates, Resonance Strengths and Line Profiles of Dielectronic Satellite Lines of He-like Ca, Fe, Ni

Sultana N. Nahar, Justin Oelgoetz and Anil K. Pradhan 259

Population Synthesis at Short Wavelengths and Spectrophotometric Diagnostic Tools for Galaxy Evolution

Alberto Buzzoni, Emanuele Bertone, Miguel Chávez and Lino H. Rodríguez-Merino 263

Constraining Galaxy Evolution With Hubble's Next Generation Spectral Library

Sally Heap and Don J. Lindler 273

Spectral Evolution and Line Strength Indices in the UV

Gustavo Bruzual A. 283

Synthesis Models in a Probabilistic Framework: Metrics of Fitting

Miguel Cerviño and Valentina Luridiana 293

World Space Observatory-Ultraviolet: International Space Mission for the Nearest Future

Mikhail Sachkov, Ana I. Gómez de Castro, Isabella Pagano, Francisco Torres, Yuri Zaiko and Boris Shustov 301

The Focal-plane Instruments on Board WSO-UV

Isabella Pagano, Mikhail Sachkov, Ana I. Gómez de Castro, Maohai Huang, Norbert Kappelmann, Salvatore Scuderi, Boris Shustov, Klaus Werner, and Gang Zhao 309

Science with the World Space Observatory - Ultraviolet

Ana I. Gómez de Castro, Isabella Pagano, Mikhail Sachkov, Alain Lecavelier des Étangs, Giampaolo Piotto, Rosa González, and Boris Shustov 319

Introducing UVIT

Leonardo Úbeda, Carmelle Robert, Laurent Drissen, and the UVIT Canadian Science Team. 329

Efficiency of Selected UV Space Based Spectrometers
Valentina Klochkova, Vladimir Panchuk, Mikhail Sachkov,
and Maxim Yushkin 337

Astronomy at the University of Guadalajara
Miguel Chávez and Gerardo Ramos-Larios 341

New Quests in Stellar Astrophysics II

Ultraviolet Properties of Evolved Stellar Populations

Chavez Dagostino, M.; Bertone, E.; Rosa Gonzalez, D.;

Rodriguez-Merino, L.H. (Eds.)

2009, XVII, 346 p. 45 illus., Hardcover

ISBN: 978-0-387-87620-7