

Table of Contents

Preface	xix
Organizing committee	xxi
Conference photograph	xxii
Conference participants	xxv
Address by the Local Organizing Committee	xxvii
<i>A. Author and C. Author</i>	
Address by the Scientific Organizing Committee	xxviii
<i>B. Author and D. Author</i>	

Part 1. ATMOSPHERES OF MASSIVE STARS

Section A. Recent observations and advances in modeling atmospheres of hot massive stars

Chair: Karel A. van der Hucht

Parameters of massive OB stars	3
<i>A. Herrero</i>	
The earliest O-type stars	13
<i>N.R. Walborn</i>	
Massive star abundances in the Galaxy and the Magellanic Clouds	22
<i>S.J. Smartt</i>	
Chemical abundances of massive stars in Local Group galaxies	30
<i>K.A. Venn, A. Kaufer, E. Tolstoy, R.-P. Kudritzki, N. Przybilla, S.J. Smartt, D.J. Lennon</i>	
Luminous Blue Variables, cool hypergiants and some impostors in the H-R diagram	38
<i>R.M. Humphreys</i>	
Stellar parameters of Wolf-Rayet stars from far-UV to mid-IR observations	47
<i>P.A. Crowther</i>	
Overloaded and fractured stellar winds	56
<i>A. Feldmeier, L.M. Oskinova, W.-R. Hamann, S.P. Owocki</i>	
Advances in radiatively driven wind models	61
<i>J. Puls, T. Repolust, T.L. Hoffmann, A. Jokuthy, R.O.J. Venero</i>	
Advances in modeling of Wolf-Rayet stars	70
<i>D.J. Hillier</i>	

Section B. Massive binaries

Chair: Anatol M. Cherepashchuk

Formation of massive binaries	80
<i>H. Zinnecker</i>	

Masses and other parameters of massive binaries	91
<i>D.R. Gies</i>	
Tidal forces and variability in close binary stars: the β factor	101
<i>G. Koenigsberger, E. Moreno, F. Cervantes</i>	
Gamma-ray bursts: the most powerful cosmic explosion	106
<i>L. Kaper</i>	
Dust formation as a diagnostic of Wolf-Rayet winds.	115
<i>P.M. Williams, K.A. van der Hucht, P.W. Morris, F. Marang</i>	
High-resolution near-IR imaging of the WCd(+OB) environments: pinwheels . . .	121
<i>P.G. Tuthill, J.D. Monnier, W.C. Danchi, N.H. Turner</i>	
X-ray observations of massive colliding wind binaries.	130
<i>M.F. Corcoran</i>	
3D-hydrodynamics of colliding winds in massive binaries.	139
<i>R. Walder, D. Folini</i>	
 Section C. Poster papers Part 1	
Spectral analysis of WC stars in M 33 using CFHT-MOS.	148
<i>J.B. Abbott, P.A. Crowther, L. Drissen, L. Dessart, P. Martin</i>	
Gamma-ray production in selected Wolf-Rayet binaries.	150
<i>P. Benaglia, G.E. Romero</i>	
Self-consistent coupling of radiative transfer and dynamics in dust driven winds	152
<i>N. Berruyer, J.-P.J. Lafon, S. Liberatore</i>	
The evolutionary stage of five southern Galactic unclassified B[e] stars	154
<i>M. Borges Fernandes, F.X. de Araújo, H. Lamers</i>	
Quantitative analysis of O-type star properties, at low metallicity	156
<i>J.-C. Bouret, T.M. Lanz, S.R. Heap, I. Hubeny, D.J. Hillier, D.J. Lennon, C.J. Evans, L.J. Smith</i>	
The Wind Momentum-Luminosity relationship: blue supergiants in the spiral galaxy NGC 300	158
<i>F. Bresolin, R.-P. Kudritzki, W. Gieren</i>	
Candidate LBVs in Local Group galaxies	160
<i>L.J. Corral, A. Herrero</i>	
A flatter metallicity gradient in the Galactic disk: non-LTE abundance calculations of OB stars	162
<i>S. Daflon, K. Cunha</i>	
Mass loss predictions and stellar masses of early-type stars.	164
<i>A. de Koter, J.S. Vink</i>	
Interferometric and spectroscopic monitoring of emission lines: detection of CIRs in hot star winds	166
<i>L. Dessart, O. Chesneau</i>	

Emission-line-profile variability as a constraint on the structure and dynamics of hot star winds	168
<i>L. Dessart, S.P. Owocki</i>	
Radio emission models of colliding-wind binary systems	170
<i>S.M. Dougherty, J.M. Pittard, L. Kasian, R.F. Coker, P.M. Williams, H. Lloyd</i>	
Radiatively driven winds: shaping bipolar LBV nebulae	172
<i>V.V. Dwarkadas, S.P. Owocki</i>	
Insights into Wolf-Rayet WC9 stars from spectroscopy	174
<i>P.R.J. Eenens, L.J. Corral</i>	
Spectroscopic studies of OB stars in the Magellanic Clouds with VLT-UVES	176
<i>C.J. Evans, P.A. Crowther, A.W. Fullerton, D.J. Hillier</i>	
Grain formation in post-shocked wind collisions of massive binary systems	178
<i>D. Falceta-Goncalves, V. Jatenco-Pereira, Z. Abraham</i>	
Binaries among the WN population in the Magellanic Clouds	180
<i>C. Foellmi, A.F.J. Moffat, M.A. Guerrero Roncel</i>	
<i>FUSE</i> observations of stellar wind variability in the LMC supergiant Sk-67°166(O4 If ⁺)	182
<i>A.W. Fullerton, D.L. Massa, R.K. Prinja, I.D. Howarth, A.J. Willis, S.P. Owocki</i>	
The massive Wolf-Rayet binary WR-98 (WN7/WC+O8-9)	184
<i>R.C. Gamen, V.S. Niemela</i>	
Instabilities in the winds of hot stars	186
<i>E.L. Gomez, R.J.R. Williams</i>	
Preliminary results from XMM-Newton observations of the massive Wolf-Rayet binary WR-22 (WN7h+O9III-V)	188
<i>E. Gosset, G. Rauw, J.-M. Vreux, Y. Nazé, I.I. Antokhin, H. Sana</i>	
Hydrodynamic model atmospheres for hot stars	190
<i>G. Gräfener, W.-R. Hamann</i>	
Wind inhomogeneities in [WC] central stars of planetary nebulae	192
<i>Y. Grosdidier, A.F.J. Moffat, A. Acker</i>	
The ejecta of η Carinae	194
<i>T.R. Gull, K. Davidson, K. Ishibashi</i>	
Near-UV nebular absorption lines of η Carinae	196
<i>T.R. Gull, G.L. Vieira, A.C. Danks</i>	
Wolf-Rayet star parameters from spectral analyses	198
<i>W.-R. Hamann, G. Gräfener, G., L. Koesterke</i>	
Theoretical X-ray line profiles from colliding wind binaries	200
<i>D.B. Henley, I.R. Stevens, J.M. Pittard</i>	
Discovery of weak magnetic fields in early B-type stars	202
<i>H.F. Henrichs, C. Neiner, V.C. Geers</i>	

Colliding winds in the WR+OB binary θ Muscae (WR-48, WC5+O6-7)	204
<i>G.M. Hill, A.F.J. Moffat, N. St-Louis</i>	
Wind models and synthetic UV spectra for O-type stars	206
<i>T.L. Hoffmann, A.W.A. Pauldrach, J. Puls</i>	
<i>FUSE</i> observations of Luminous Blue Variables	208
<i>R.C. Iping, G. Sonneborn, D.L. Massa</i>	
Unusual 2001 periastron passage in the colliding-wind binary WR-140 (WC7pd+O4-5)	210
<i>S.V. Marchenko, A.F.J. Moffat, K.P. Panov, W. Seggewiss, V.G. Zubko</i>	
Line-blanketing effects in atmospheres of O-type stars	212
<i>F. Martins, D. Schaerer</i>	
X-ray line profiles from structured stellar winds	214
<i>L.M. Oskinova, A. Feldmeier, W.-R. Hamann</i>	
A critical comparison of spectroscopic and evolutionary masses for O-type binary systems	216
<i>L.R. Penny, D.R. Gies, W.G. Bagnuolo, J.H. Wise, A. Herrero, D.J. Stickland, C. Lloyd</i>	
In hot pursuit of the hidden companion of η Carinae: an X-ray determination of the wind parameters.	218
<i>J.M. Pittard, M.F. Corcoran</i>	
The dominant X-ray wind in massive star binaries	220
<i>J.M. Pittard, I.R. Stevens</i>	
High-resolution X-ray imaging of the colliding winds shock in WR 147 (WN8(h)+B0.5V)	222
<i>J.M. Pittard, I.R. Stevens, P.M. Williams, A.M.T. Pollock, S.L. Skinner, M.F. Corcoran, A.F.J. Moffat</i>	
Long-term spectral variability of the O4 If ⁺ star HD 15570 in the open cluster IC 1805	224
<i>V.F. Polcaro, R.F. Viotti, L. Norci, C. Rossi, P.R.J. Eenens, L.J. Corral</i>	
Clumps and shocks in the outer winds of hot stars	226
<i>M. Runacres, S.P. Owocki</i>	
A gallery of cool hypergiant — imaging their circumstellar environments	228
<i>M.T. Schuster, R.M. Humphreys, N. Smith, K. Davidson, R.D. Gehrz</i>	
Radio continuum observations of massive stars in open cluster NGC 6231 and the Sco OB1 association	230
<i>D.Y.A. Setia Gunawan, J.M. Chapman, I.R. Stevens, G. Rauw, C. Leitherer</i>	
A search for the most massive stars in M 33	232
<i>O. Sholukhova, S.N. Fabrika, A.N. Burenkov</i>	
New neon-abundance results in Galactic WN and WC stars	234
<i>J.-D.T. Smith</i>	

The stellar wind geometry of η Carinae	236
<i>N. Smith, K. Davidson, T.R. Gull, K. Ishibashi</i>	
<i>FUSE</i> observations of the SMC Wolf-Rayet binary Sand 1 (WO4+O4V): atmospheric eclipses and colliding winds	241
<i>N. St-Louis, A.F.J. Moffat, S.V. Marchenko</i>	
High-resolution spectroscopy of two LBV cycles of HR Car.	243
<i>T. Szeifert, A. Kaufer, P.A. Crowther, O. Stahl, C. Sterken</i>	
B-type supergiants in the M 31	245
<i>C. Trundle, P.L. Dufton, D.J. Lennon, S.J. Smartt, M.A. Urbaneja</i>	
Dynamical simulations of magnetically channeled line-driven stellar winds	247
<i>A. ud-Doula, S.P. Owocki</i>	
UV and optical quantitative spectroscopy of early B-type supergiants in M 33	249
<i>M.A. Urbaneja, A. Herrero, D.J. Lennon, F. Najarro, J. Puls, S.J. Smartt, R.-P. Kudritzki</i>	
Near-IR spectroscopic search for binary companions to dusty WC stars	251
<i>W.P. Varricatt</i>	
Near-IR spectroscopic monitoring of WR 140 (WC7pd+O4-5) during the 2001 periastron passage	253
<i>W.P. Varricatt, P.M. Williams, N.M. Ashok</i>	
Search for magnetic fields in A-type supergiants.	255
<i>E. Verdugo, A. Talavera, A.I. Gómez de Castro, H.F. Henrichs</i>	
Post-outburst polarimetry of the binary HD 5980 (O4-6/LBV+WN3): rapid density enhancements along the polar axis and equatorial plane	257
<i>A. Villar-Saflí, A.F.J. Moffat, N. St-Louis</i>	
The winds of Luminous Blue Variables and the mass of AG Carinae	259
<i>J.S. Vink, A. de Koter</i>	
Variable dust formation by the double-line spectroscopic binary WR70 (HD 137603, WC9vd+B0I)	261
<i>P.M. Williams, K.A. van der Hucht, F. Marang</i>	
<i>FUSE</i> far-ultraviolet spectroscopy of Wolf-Rayet stars	263
<i>A.J. Willis, P.A. Crowther, J.B. Hutchings, A.W. Fullerton, K.R. Brownsberger, D.L. Massa, N.R. Walborn</i>	

Part 2. INTERIORS OF MASSIVE STARS

Section A. Recent evolutionary models for massive single and binary stars

Chair: Gloria Koenigsberger

The role of rotation and mass loss in the evolution of massive stars	267
<i>A. Maeder, G. Meynet</i>	
On the evolution of massive close binaries	275
<i>N. Langer, S. Wellstein, J. Petrovic</i>	

Instabilities in massive stars	281
<i>S.P. Owocki</i>	
Testing convective mixing in massive stars	291
<i>M.F. El Eid, P.J. Flower</i>	
Section B. Massive single star and close binary evolution in different environments	
Observed instabilities in OB and Wolf-Rayet stars	296
<i>S.V. Marchenko</i>	
Massive star evolution in the Small Magellanic Cloud	308
<i>D.J. Lennon</i>	
Observational constraints on massive star evolution	316
<i>P. Massey</i>	
Section C. Massive star evolution at very low to zero metallicity: Population III stars	
Line driven winds, ionizing fluxes and UV-spectra of hot stars at extremely low metallicity	325
<i>R.-P. Kudritzki</i>	
Evolution of zero-metallicity massive stars	334
<i>P. Marigo, C. Chiosi, L. Girardi, R.-P. Kudritzki</i>	
Rotating stellar interior models at $Z = 10^{-5}$ and CNO yields for early galactic evolution	341
<i>G. Meynet, A. Maeder</i>	
Section D. Pre-supernova phase, Type Ib, Type Ic and Type II supernova formation, collapsars	
<i>Chair: Virpi S. Niemela</i>	
Searching for hydrogen in Type Ib supernovae, and for helium and hydrogen in TypeIc supernovae	346
<i>D. Branch</i>	
The pre-supernova evolution of rotating massive stars	357
<i>A. Heger, S.E. Woosley, N. Langer</i>	
Inventory of black hole binaries	365
<i>J.A. Orosz</i>	
Distinction between distribution of masses of Wolf-Rayet stars and that of relativistic objects	372
<i>A.M. Cherepashchuk</i>	
Explosions from stellar collapse	377
<i>C.L. Fryer</i>	
Aspherical supernova explosions	387
<i>P.A. Höftlich, D. Baade, A.M. Khoklov, L. Wang, J.C. Wheeler</i>	

Hypernovae and their nucleosynthesis	395
<i>K. Nomoto, K. Maeda, H. Umeda, T. Ohkubo, J. Deng, P. Mazzali</i>	

Section E. Poster papers Part 2

Evolution of Wolf-Rayet stars in binary systems: analysis of distributions of masses and orbital eccentricities	404
<i>A.M. Cherepashchuk, V.G. Karetnikov</i>	
Black hole formation preceded by a SN explosion or not: evidence from Galactic chemical evolution	406
<i>E. De Donder, D. Vanbeveren</i>	
Influence of radiation pressure and wind momentum on mass transfer in massive binaries	408
<i>L. Dessart, J. Petrovic, N. Langer</i>	
The evolution of close helium star to neutron star binaries	410
<i>J.D.M. Dewi, O.R. Pols</i>	
On the modeling of the outflowing envelopes of massive evolved stars at arbitrary optical depths	412
<i>A.V. Dorodnitsyn, G.S. Bisnovatyi-Kogan</i>	
Measuring the true supernova rate in galaxies	414
<i>M.R. Kidger, F. Martín-Luis</i>	
Model atmospheres of massive zero-metal stars.	416
<i>E.J. Lentz, P.H. Hauschildt, J.P. Aufdenberg, E. Baron</i>	
Progenitor models of Wolf-Rayet binaries: short-period WNE+O binaries with mass ratios $q \simeq 0.5$	418
<i>J. Petrovic, N. Langer</i>	
A spectroscopic survey of the WNL population in the LMC: very preliminary results	421
<i>O. Schnurr, A.F.J. Moffat, N. St-Louis, C. Foellmi, G. Skalkowski, M.M. Shara, V.S. Niemela, S. Vennes</i>	
Detecting the progenitors of core-collapse supernovae	423
<i>S.J. Smartt</i>	
Discovery of narrow O VI emission from SN 1987A	425
<i>G. Sonneborn, P. Lundqvist, R.C. Iping, D.L. Massa</i>	
On the possibility of partial matter mixing in rotating massive stars	427
<i>E.I. Staritsin</i>	

Part 3. LOCATION AND DISTRIBUTION OF MASSIVE STARS

Section A. Distribution of massive stars, H II regions, open clusters and OB associations

Chair: André Maeder

Distribution of star-forming complexes and the structure of our Galaxy	431
<i>D. Russeil</i>	

The Galactic distribution of Wolf-Rayet stars: an optical and infrared approach <i>K.A. van der Hucht</i>	441
Wolf-Rayet stars in Local Group starbursts. <i>L. Drissen</i>	451
Section B. Massive stellar content in H II regions, including obscured giant H II regions	
The stellar content of obscured Galactic giant H II regions <i>R.D. Blum</i>	458
The stellar content of obscured compact H II regions <i>M.M. Hanson, L. Kaper, A. Bik, F. Comerón, J. Puls, A. Jokuthy, R.-P. Kudritzki</i>	467
UCH II regions in extragalactic clusters and associations. <i>K.E. Johnson</i>	474
Nebular diagnostics of hot star atmospheres <i>G. Stasińska, D. Schaerer, C.J. Zeppen</i>	481
Section C. Massive stars at the Galactic Center	
<i>Chair: Francesca Matteucci</i>	
Massive stars and the creation of our Galactic Center <i>D.F. Figer</i>	487
Radio observations of Galactic Center massive stars <i>C.C. Lang</i>	497
Section D. From resolved to unresolved massive star populations	
Cygnus OB2 at all wavelengths. <i>J. Knödlseder</i>	505
Galactic starburst NGC 3603 from X-rays to radio <i>A.F.J. Moffat and the XMEGA consortium</i>	515
M 82: starburst Rosetta Stone <i>N.M. Förster Schreiber, R. Genzel, D. Lutz, A. Sternberg</i>	523
The very rich massive post-main-sequence star population of the open cluster West- erlund 1. <i>I. Negueruela, J.S. Clark</i>	531
Section E. Poster papers Part 3	
Massive star population in circumnuclear star-forming regions <i>M. Álvarez-Álvarez, Á.I. Díaz, M. Castellanos</i>	537
Synthetic UV spectra of starburst regions with massive close binaries <i>H. Belkus, J. Van Bever, D. Vanbeveren, W. van Rensbergen</i>	539

<i>Contents</i>	xiii
On the ionizing source of the Flame Nebula (NGC 2024)	541
<i>A. Bik, A. Lenorzer, L. Kaper, A. de Koter, R. Waters, F. Comerón, M.M. Hanson</i>	
Young open clusters in the Carina region	543
<i>G. Carraro, P. Marigo, P. Ventura, M. Romaniello, F. Patat</i>	
Resolved and unresolved populations: statistics and synthesis models	545
<i>M. Cerviño</i>	
Wolf-Rayet stars at 1-2 Mpc	547
<i>P.A. Crowther, J.B. Abbott, L. Drissen, H. Schild, W. Schmutz, P. Royer, S.J. Smartt</i>	
The chaotic ISM of the post(?)-starburst galaxy NGC 1569	549
<i>R.J. Dufour, B.A. Buckalew, P.L. Shopbell, D.K. Walter</i>	
Young stellar populations in several photometric systems	551
<i>L. Girardi, G. Bertelli, C. Chiosi, P. Marigo</i>	
A <i>HST</i> study of young massive star clusters in compact H II regions of the Magellanic Clouds	553
<i>M. Heydari-Malayeri, V. Charmandaris, L. Deharveng, F. Meynadier, M.R. Rosa, D. Schaerer, H. Zinnecker</i>	
A near-IR search for Galactic Wolf-Rayet stars.	555
<i>N.L. Homeier, R.D. Blum, P.S. Conti, A. Pasquali, A. Damineli</i>	
The Carina spiral feature - an investigation based on a complete magnitude-limited <i>wby</i> β sample	558
<i>N.T. Kaltcheva</i>	
A spectroscopic, photometric, and astrometric Galactic O-type star database. . .	560
<i>J. Maíz-Apellániz, N.R. Walborn</i>	
Triggered massive star formation in the open cluster NGC 1893.	562
<i>A. Marco, I. Negueruela</i>	
Spectroscopic analysis of new-born massive stars in SMC N 81.	564
<i>F. Martins, D. Schaerer, M. Heydari-Malayeri</i>	
Metallicity and binarity in WC and WO stars	566
<i>L. Norci, V.F. Polcaro, R.F. Viotti</i>	
Synthetic X-ray emission from starburst regions.	568
<i>L. Norci, E.J.A. Meurs</i>	
Wolf-Rayet populations in starburst galaxies	570
<i>R.P.F. Norris, L.J. Smith, P.A. Crowther</i>	
Classification of Wolf-Rayet stars in NGC 595 in M 33 through high-spatial resolution observations	572
<i>P. Royer, I. Lundström, J.-M. Vreux</i>	
Hidden star clusters in the starburst galaxy He2-10	574
<i>W.D. Vacca, K.E. Johnson, P.S. Conti</i>	

The impact of close binary evolution on the properties of the WR-bump emission-lines of Wolf-Rayet galaxies	576
<i>J. Van Bever, D. Vanbeveren</i>	
A HST imaging survey of a sample of 61 Galactic Wolf-Rayet stars — the WC8-9 subsample	578
<i>D.J. Wallace, A.F.J. Moffat, M.M. Shara, D.R. Gies, V.S. Niemela, E. Nelan</i>	
The Local Group census: IC-10.	581
<i>S.A. Wright, R. Greimel, D.J. Lennon, R.L.M. Corradi, N.A. Walton</i>	

Part 4. FEEDBACK FROM MASSIVE STARS

Section A. Environment of massive stars

Chair: Allan J. Willis

Ring nebulae around massive stars throughout the Hertzsprung-Russell diagram	585
<i>Y.-H. Chu</i>	
Radio observations of interstellar bubbles surrounding massive stars	596
<i>C.E. Cappa, E.M. Arnal, S. Cichowolski, W.M. Goss, S. Pineault</i>	
New line-blanketed model atmospheres and their impact on synthesis models.	604
<i>L.J. Smith, R.P.F. Norris, P.A. Crowther</i>	

Section B. Massive star induced galactic outflows

Recent progress in understanding the hot and warm gas phases in the halos of star-forming galaxies	612
<i>D.K. Strickland, T.M. Heckman, E.J.M. Colbert, C.G. Hoopes, K.A. Weaver</i>	
Dispersal of massive star products and consequences for galactic chemical evolution	620
<i>M.S. Oey</i>	
Outflows from ellipticals: the role of supernovae	630
<i>F. Matteucci, A. Pipino</i>	
Feedback of massive stars on the ISM: a XMM-Newton view of the superbubble N 51D	637
<i>D.J. Bomans, J. Rossa, K. Weis, K. Dennerl</i>	

Section C. Understanding unresolved massive star populations

Chair: Artemio Herrero

The massive star Initial Mass function.	642
<i>D. Schaerer</i>	
Massive stellar populations in the infrared	652
<i>C. Leitherer</i>	
Massive stars in low-redshift galaxies	663
<i>M.-A. Treyer</i>	

Section D. Massive stars at high redshifts

Massive star populations in Lyman break galaxies	671
<i>M. Pettini, S.A. Rix, C.C. Steidel, A.E. Shapley, K.L. Adelberger</i>	
QSO absorption lines, winds, and the high-redshift intergalactic medium	681
<i>R.F. Carswell</i>	
Re-ionization of the IGM — massive stars versus QSOs	687
<i>P. Madau</i>	

Section E. Poster papers Part 4

Integrated photometric and spectroscopic properties of massive stellar clusters in Wolf-Rayet galaxies	696
<i>B.A. Buckalew, R.J. Dufour, H.O. Castañeda</i>	
On the ionizing populations in GEHRs: unveiling integrated properties from the analysis of the Wolf-Rayet population	698
<i>M. Castellanos, Á.I. Díaz, E. Terlevich</i>	
The interstellar medium local to HD 10125 (O9.7II)	700
<i>S. Cichowolski, E.M. Arnal, C.E. Cappa, S. Pineault, N. St-Louis</i>	
Abundance ratios in star-forming galaxies: clues to galaxy evolution	702
<i>T. Contini, M.-A. Treyer, M. Mouhcine</i>	
Massive stars in galaxies at high redshift: SMM J 14011+0252	704
<i>D.F. de Mello, T. Wiklind, C. Leitherer</i>	
Gamma-rays from massive stars in Cygnus and Orion	706
<i>R. Diehl, K. Kretschmer, S. Plüschke, M. Cerviño, D.H. Hartmann</i>	
Evolution of supernovae in the winds of massive stars	710
<i>V.V. Dwarkadas</i>	
Mrk 1087: a puzzling suspected Wolf-Rayet galaxy	712
<i>C. Esteban, Á.R. López-Sánchez, M. Rodríguez</i>	
The Wolf-Rayet population in the galaxy CTS 1026	714
<i>G. Gräfener, L. Koesterke, W.-R. Hamann</i>	
CFHT F-P 2D spectroscopy in H α of the ejected Wolf-Rayet ring nebula M1-67: universal multifractal analysis and turbulent status	716
<i>Y. Grosdidier, A.F.J. Moffat, S. Blais-Ouellette, G. Joncas, A. Acker</i>	
An X-ray survey of Wolf-Rayet stars in the Magellanic Clouds	718
<i>M.A. Guerrero Roncel, Y.-H. Chu</i>	
A Chandra study of the morphological structure of the Wolf-Rayet dwarf starburst galaxy NGC 4214	720
<i>J.M. Hartwell, I.R. Stevens, D.K. Strickland, T.M. Heckman</i>	
Physical conditions in H II galaxies	722
<i>C. Kehrig, E. Telles, F. Cuisinier</i>	
Measuring the evolution of H II and starburst galaxies	724
<i>J.R.S. Leão, R.R. Lacerda, R. Cid Fernandes Jr.</i>	

Physical properties of low-luminosity galaxies at $z \approx 2$	726
<i>M. Lemoine-Busserolle, T. Contini, R. Pelló, J.-F. Le Borgne, J.-P. Kneib, C. Lidman</i>	
The ionized gas in and around the Wolf-Rayet galaxy NGC 1741	728
<i>Á.R. López-Sánchez, C. Esteban, M. Rodríguez</i>	
Chemical abundances of the H II regions NGC 5461 and NGC 5471 in M 101, derived from echelle spectrophotometry	730
<i>V. Luridiana, C. Esteban, M. Peimbert, A. Peimbert</i>	
Molecular gas around the Wolf-Rayet star WR 18 (WN4)	732
<i>A.P. Marston</i>	
Ultraviolet spectra of star-forming galaxies with time-dependent dust obscuration	734
<i>L.P. Martins, C. Leitherer, D. Calzetti</i>	
Modeling the strings in the outer regions of η Carinae	736
<i>M.P. Redman, J. Meaburn, A.J. Holloway</i>	
Interaction between OB stars and the interstellar medium	738
<i>M. Relaño Pastor, J.E. Beckman, M. Rozas</i>	
Shocked CO and ^{13}CO around Wolf-Rayet ring nebulae	740
<i>J.R. Rizzo, J. Martín-Pintado, J.F. Desmurs</i>	
Complex molecules in Wolf-Rayet ring nebula NGC 2359	742
<i>J.R. Rizzo, J. Martín-Pintado, J.F. Desmurs</i>	
Synthetic high-resolution line spectra of star-forming galaxies below 1200 Å, based on FUSE spectral libraries of hot stars	744
<i>C. Robert, A. Pellerin, A. Aloisi, C. Leitherer, C.G. Hoopes, T.M. Heckman</i>	
Towards observations of Population III galaxies	747
<i>D. Schaerer, R. Pelló</i>	
A spectroscopic analysis of the Trapezium Cluster stars	749
<i>S. Simón-Díaz, A. Herrero, C. Esteban</i>	
Chandra observations of the dwarf starburst and Wolf-Rayet galaxies NGC 4449 and NGC 5253	751
<i>L.K. Summers, I.R. Stevens, D.K. Strickland, T.M. Heckman</i>	
Spectrophotometry of six high-excitation compact H II regions in the Magellanic Clouds	753
<i>G. Testor</i>	
The stellar population in the dwarf starburst galaxy NGC 1705	755
<i>G.A. Vázquez, C. Leitherer, D. de Mello, T.M. Heckman, G.R. Meurer, C.L. Martin, K.R. Sembach</i>	
LBV (candidate) nebulae: bipolarity and outflows	757
<i>K. Weis</i>	
A high-resolution study of η Carinae's outer ejecta	759
<i>K. Weis, M.F. Corcoran, K. Davidson, R.M. Humphreys</i>	

Part 5. ENDING THE SYMPOSIUM

Summary of the Symposium	763
<i>P.S. Conti</i>	

Part 6. REPORTS ON SPECIAL SESSIONS

Special session on the masses of the most massive stars and the Ω limit	773
<i>A.F.J. Moffat, J. Puls</i>	
Special session on recent advances in nebular diagnostics	777
<i>D. Schaerer, P.A. Crowther, M.S. Oey</i>	
Author index	781
Object index	785