

	v
Table of Contents	
Preface	xi
Origins of Stellar Halos.....	1
<i>K. V. Johnston</i>	
Tracing the stellar halo of an early type galaxy out to 25 effective radii	9
<i>M. Rejkuba</i>	
Stellar halos around Local Group galaxies.....	15
<i>A. W. McConnachie</i>	
Resolving the extended stellar halos of nearby galaxies: the wide-field PISCeS survey.....	21
<i>D. Crnojević, D. J. Sand, N. Caldwell, P. Guhathakurta, B. McLeod, A. Seth, J. D. Simon, J. Strader & E. Toloba</i>	
Intragroup and Intracluster Light	27
<i>J. C. Mihos</i>	
New axes for the stellar mass fundamental plane	35
<i>P. L. Schechter</i>	
Direct imaging of haloes and truncations in face-on nearby galaxies.....	39
<i>J. H. Knapen, S. P. C. Peters, P. C. van der Kruit, I. Trujillo, J. Fliri, M. Cisternas & L. S. Kelvin</i>	
Very Low-Mass Stars with Extremely Low Metallicity in the Milky Way's Halo.	45
<i>W. Aoki, T. C. Beers, T. Suda, S. Honda & Y. S. Lee</i>	
Searching for chemical relics of first stars with LAMOST and Subaru	51
<i>H. Li, W. Aoki, G. Zhao, S. Honda, N. Christlieb & T. Suda</i>	
Inhomogeneous chemical enrichment in the Galactic Halo.....	57
<i>C. Kobayashi</i>	
Exploring the early Universe with extremely metal-poor stars.....	64
<i>T. T. Hansen, N. Christlieb, C. J. Hansen & T. C. Beers</i>	
Planetary Nebulae and their parent stellar populations. Tracing the mass assembly of M87 and Intracluster light in the Virgo cluster core.....	69
<i>M. Arnaboldi, A. Longobardi & O. Gerhard</i>	
RR Lyrae to understand the Galactic halo	77
<i>G. Fiorentino</i>	
PN populations in the local group and distant stellar populations	83
<i>W. Reid</i>	
The Outer Galactic Halo As Probed By RR Lyr Stars From the Palomar Transient Facility + Keck.....	91
<i>J. Cohen, B. Sesar, S. Banholzer, the PTF Collaboration</i>	
Globular clusters and their contribution to the formation of the Galactic halo ..	97
<i>E. Carretta</i>	

vi	<i>Contents</i>
Did globular clusters contribute to the stellar population of the Galactic halo?	104
<i>C. Charbonnel & M. Krause</i>	
Are the globular clusters with significant internal [Fe/H] spreads all former dwarf galaxy nuclei?	110
<i>G. S. Da Costa</i>	
RR Lyrae stars as probes of the Milky Way structure and formation	116
<i>P. Pietrukowicz & OGLE collaboration</i>	
Globular clusters in M31, Local Group, and external galaxies	120
<i>S. S. Larsen</i>	
Globular clusters as tracers of the halo assembly of nearby central cluster galaxies	128
<i>M. Hilker & T. Richtler</i>	
Recent Results from SPLASH: Chemical Abundances and Kinematics of Andromeda's Stellar Halo	134
<i>K. M. Gilbert, R. Beaton, C. Dorman & the SPLASH collaboration</i>	
Globular Cluster Streams as Galactic High-Precision Scales	140
<i>A. H. W. Küpper, E. Balbinot, A. Bonaca, K. V. Johnston, D. W. Hogg, P. Kroupa & B. X. Santiago</i>	
Stellar kinematics and dark matter in dwarf galaxies	145
<i>G. Battaglia</i>	
Globular Clusters, Dwarf Galaxies, and the Assembly of the M87 Halo	153
<i>E. W. Peng, H.-X. Zhang, C. Liu & Y. Liu</i>	
Chemical Abundances of Metal-poor stars in Dwarf Galaxies	159
<i>K. A. Venn, P. Jablonka, V. Hill, E. Starkenburg, B. Lemasle, M. Shetrone, M. Irwin, J. Norris, D. Yong, G. Gilmore, S. Salvadori, A. Skuladottir & E. Tolstoy</i>	
Chemical enrichment in Ultra-Faint Dwarf galaxies	164
<i>D. Romano</i>	
Multiple populations in the Sagittarius nuclear cluster M 54 and in other anomalous globular clusters	170
<i>A. P. Milone</i>	
Investigating the earliest epochs of the Milky Way halo	176
<i>E. Starkenburg & the Pristine Team</i>	
Metallicity Gradients in the Halos of Elliptical Galaxies	182
<i>J. E. Greene, C.-P. Ma, A. Goulding, N. J. McConnell, J. P. Blakeslee, T. Davis & J. Thomas</i>	
Kinematics and Angular Momentum in Early Type Galaxy Halos	190
<i>J. P. Brodie, A. Romanowsky & the SLUGGS team</i>	
Stellar populations of stellar halos: Results from the Illustris simulation	197
<i>B. A. Cook, C. Conroy, A. Pillepich & L. Hernquist</i>	
Gas accretion from halos to disks: observations, curiosities, and problems	204
<i>B. G. Elmegreen</i>	

<i>Contents</i>	vii
Studying stellar halos with future facilities	209
<i>L. Greggio, R. Falomo & M. Uslenghi</i>	
The formation of the smooth halo component	215
<i>J. Peñarrubia</i>	
Resolving the stellar halos of six massive disk galaxies beyond the Local Group.	222
<i>A. Monachesi, E. F. Bell, D. J. Radburn-Smith, R. S. de Jong, J. Bailin, B. Holwerda & D. Streich</i>	
Stellar halos and the link to galaxy formation	228
<i>A. Helmi</i>	
The early gaseous and stellar mass assembly of Milky Way-type galaxy halos	235
<i>G. Hensler & M. Petrov</i>	
Contributions to the Galactic halo from in-situ, kicked-out, and accreted stars	241
<i>A. A. Sheffield, K. V. Johnston, K. Cunha, V. V. Smith & S. R. Majewski</i>	
Which processes shape stellar population gradients of massive galaxies at large radii?	247
<i>M. Hirschmann</i>	
Dual Stellar Halos in Early-type Galaxies and Formation of Massive Galaxies	253
<i>M. G. Lee & I. S. Jang</i>	
IAU Symposium 317 Summary	259
<i>R. G. Gratton</i>	
The Milky Way, the Galactic Halo, and the Halos of Galaxies	266
<i>O. Gerhard</i>	
<i>r</i> -Process Elements as Tracers of Enrichment Processes in the Early Halo	272
<i>J. Andersen, B. Nordström & T. T. Hansen</i>	
Origin of strong magnetic fields in Milky Way-like galaxies	274
<i>A. M. Beck</i>	
Resolved Stellar Halos of M87 and NGC 5128: Metallicities from the Red-Giant Branch	276
<i>S. A. Bird</i>	
Subaru Hyper Suprime Cam Survey of the Andromeda Halo	278
<i>M. Chiba, M. Tanaka & Y. Komiyama</i>	
Galactic Archaeology with the Subaru Prime Focus Spectrograph	280
<i>M. Chiba, J. Cohen & R. F. G. Wyse</i>	
Clues on the first stars from CEMP-no stars	282
<i>A. Choplin, G. Meynet, A. Maeder, R. Hirschi, S. Ekström & C. Chiappini</i>	
Formation and evolution of sub-galactic structures in a cosmological context	284
<i>K. Chun, J. Shin & S. S. Kim</i>	
The extended stellar substructures of four metal-poor globular clusters in the Galactic bulge	286
<i>S.-H. Chun & Y.-J. Sohn</i>	

viii	<i>Contents</i>	
Measuring the Stellar Halo Velocity Anisotropy With 3D Kinematics		288
<i>E. C. Cunningham, A. J. Deason, P. Guhathakurta, C. M. Rockosi, R. P. van der Marel & S. Tony Sohn</i>		
Proper-Motion Based Kinematics Study of Galactic RR Lyraes		290
<i>A. K. Dambis, L. N. Berdnikov, A. S. Rastorguev & M. V. Zabolotskikh</i>		
From the Outskirts of Galaxies to Intra Cluster Light		292
<i>K. Dolag, R.-S. Remus & A. F. Teklu</i>		
Photometric Metallicity of the Sagittarius Stream in the south Galactic cap.		294
<i>C. Du, J. Gu, Y. Jia, X. Peng, Z. Wu, J. Ma, X. Zhou & Y. Liang</i>		
Tracing the Galactic Halo: Obtaining Bayesian mass estimates of the Galaxy in the presence of incomplete data		296
<i>G. Eadie, W. Harris, L. Widrow & A. Springford</i>		
Halo formation and evolution: unification of structure and physical properties		298
<i>A. D. Ernest & M. P. Collins</i>		
Lithium evolution from Pre-Main Sequence to the Spite plateau: an environmental solution to the cosmological lithium problem.		300
<i>X. Fu, A. Bressan, P. Molaro & P. Marigo</i>		
Hot subdwarf stars in the Galactic halo Tracers of prominent events in late stellar evolution		302
<i>S. Geier, T. Kupfer, V. Schaffenroth, U. Heber & the MUCHFUSS collaboration</i>		
Searching for planetary nebulae at the Galactic halo via J-PAS		304
<i>D. R. Gonçalves, T. Aparício-Villegas, S. Akras, A. Cortesi, M. Borges-Fernandes, S. Daflon, C. B. Pereira, S. Lorenz-Martins, W. Marcolino, A. Kanaan, K. Viironen, C. M. de Oliveira, A. Molino, A. Ederoclite & the J-PAS Collaboration</i>		
A universality of dark-halo surface density for the Milky Way and Andromeda dwarf satellites as a probe of the coldness of dark matter		306
<i>K. Hayashi & M. Chiba</i>		
Chemo-dynamical evolution model: Enrichment of <i>r</i> -process elements in the Local Group dwarf galaxies		308
<i>Y. Hirai, Y. Ishimaru, T. R. Saitoh, M. S. Fujii, J. Hidaka & T. Kajino</i>		
Chemical evolution of <i>r</i> -process elements in the Draco dwarf spheroidal galaxy		310
<i>M. N. Ishigaki, T. Tsujimoto, T. Shigeyama & W. Aoki</i>		
Connection between cusp-core problem and too-big-to-fail problem in CDM model		312
<i>K. Kato, M. Mori & G. Ogiya</i>		
Two New Ultra-Faint Star Clusters in the Milky Way Halo		314
<i>D. Kim</i>		
Disk dwarf galaxy as the progenitor of the Andromeda giant stream		316
<i>T. Kirihara, Y. Miki, M. Mori & T. Kawaguchi</i>		
Chemical Evolution of R-process Elements in the Hierarchical Galaxy Formation		318
<i>Y. Komiya & T. Shigeyama</i>		

<i>Contents</i>		ix
The Milky Way evolution under the RAVE perspective		320
<i>G. Kordopatis on behalf of the RAVE consortium</i>		
Imaging of NGC 5907's stellar stream		324
<i>S. Laine, C. J. Grillmair, D. Martínez-Delgado, A. J. Romanowsky, P. L. Capak, R. G. Arendt, M. L. N. Ashby, J. E. Davies, S. R. Majewski & R. J. GaBany</i>		
What can isolated elliptical galaxies tell us about Cold Dark Matter?		326
<i>R. R. Lane, T. Richtler & R. Salinas</i>		
Reconstructing the Accretion History of the Galactic Halo Using Stellar Chemical Abundance Ratio Distributions		328
<i>D. M. Lee, K. V. Johnston, B. Sen & W. Jessop</i>		
Measure the local dark matter density with LAMOST spectroscopic survey		330
<i>C. Liu, Q. Xia & S. Mao</i>		
Halo Mass Estimation for Galaxy Groups : The Role Of Magnitude Gaps		332
<i>Y. Lu, X. Yang & S. Shen</i>		
Impact of NLTE on research of early chemical enrichment of the dwarf galaxies .		334
<i>L. Mashonkina, P. Jablonka, P. North & T. Sitnova</i>		
Very Metal-poor Stars Observed by the RAVE Survey		336
<i>G. Matijević & the RAVE Collaboration</i>		
Near-Field Cosmology with RR Lyrae Variable Stars: A First View of Substructure in the Southern Sky		338
<i>C. Navarrete, S. Duffau, A. K. Vivas, M. Catelan, G. Hajdu, G. Torrealba, C. Cortés, V. Belokurov, S. Koposov & A. J. Drake</i>		
Study of the Milky Way's hot coronal gas with its dwarf galaxies		340
<i>S. Pasetto, M. Cropper, Y. Fujita, C. Chiosi & E. K. Grebel</i>		
Identifying Remote Halo Giants in High-Latitude Fields with Kepler 2		342
<i>R. C. Peterson</i>		
Several evolutionary channels for bright planetary nebulae		344
<i>M. G. Richer & M. L. McCall</i>		
The Milky Way's halo in 6D: <i>Gaia</i> 's Radial Velocity Spectrometer performance .		346
<i>G. Seabroke, M. Cropper, D. Katz, P. Sartoretti, P. Panuzzo, O. Marchal, A. Gueguen, K. Benson, C. Dolding, H. Huckle, M. Smith & S. Baker</i>		
Morphology and Structures of Nearby Dwarf Galaxies		348
<i>M. Seo & H. B. Ann</i>		
Discovery of new dwarf galaxies around NGC4631 with Subaru/Hyper Suprime-Cam		350
<i>M. Tanaka, M. Chiba & Y. Komiyama</i>		
CNO abundances in giants of the peculiar globular cluster NGC 1851		352
<i>G. Tautvaišienė, A. Drazdauskas, C. Lardo, S. L. Martell, E. Pancino, E. Stonkutė, & Gaia-ESO Consortium</i>		

x	<i>Contents</i>	
	The Stellar Age- T_{eff} -Kinematical Asymmetry in the Solar Neighborhood from LAMOST	354
	<i>H. J. Tian, C. Liu, J. L. Carlin, Y. H. Zhao & X. L. Chen</i>	
	Baryonic inflow and outflow histories in disk galaxies as revealed from observations of distant star-forming galaxies	356
	<i>D. Toyouchi & M. Chiba</i>	
	Stellar orbital properties as diagnostics of the origin of the stellar halo	358
	<i>M. Valluri, S. R. Loebman, J. Bailin, A. Clarke, V. P. Debattista & G. Stinson</i>	
	Building Blocks of the Milky Way's Stellar Halo.	360
	<i>P. van Oirschot, E. Starckenburg, A. Helmi & G. Nelemans</i>	
	How the first stars shaped the faintest gas-dominated dwarf galaxies.	362
	<i>R. Verbeke, B. Vandebroucke & S. De Rijcke</i>	
	The Dynamical Evolution of Galactic X-ray Coronae in Clusters	364
	<i>R. Vijayaraghavan & P. Ricker</i>	
	Globular cluster clustering around ultra compact dwarf galaxies in the halo of NGC 1399	367
	<i>K. Voggel, M. Hilker & T. Richtler</i>	
	Age-metallicity-velocity relation of stars as seen by RAVE	369
	<i>J. Wojno, G. Kordopatis, M. Steinmetz, G. Matijević, P. J. McMillan, the RAVE Collaboration</i>	
	The LAMOST Complete Spectroscopic Survey of Pointing Area at Southern Galactic Cap.	371
	<i>H. Wu, M. Yang, M. I Lam, F. Yang, C.-J. Wu, T.-W. Cao & LAMOST Collaboration</i>	
	A catalog of M-type star candidates in the LAMOST data release 1	373
	<i>J. Zhong, S. Lépine, J. Li, L. Chen, & J. Hou</i>	
	Author index	375