



## Table of Contents

Preface .....	xvi
The Organizing Committee.....	xviii
Participants .....	xix
<b>Plenary Session: From Gas to Stars Over Cosmic Time</b>	
From Gas to Stars over Cosmic Time ( <i>Invited Review</i> ) .....	3
<i>M.-M. Mac Low</i>	
<b>Session 1: Molecular Clouds: Internal Properties, Star Formation, Stellar Feedback</b>	
Molecular Clouds: Internal Properties, Turbulence, Star Formation and Feedback ( <i>Invited Review</i> ).....	19
<i>J. C. Tan, S. N. Shaske &amp; S. Van Loo</i>	
Star-forming Substructure within Molecular Clouds ( <i>Invited</i> ) .....	29
<i>J. Di Francesco</i>	
GMC Origins and Turbulent Motions in Spiral and Dwarf Galaxies.....	35
<i>B. G. Elmegreen</i>	
An evolutionary sequence for high-mass star formation .....	39
<i>S. L. Breen &amp; S. P. Ellingsen</i>	
Deuterium Fractionation and Ionization Degree in Massive Protostellar/cluster Cores .....	40
<i>H.-R. Chen, S.-Y. Liu &amp; Y.-N. Su</i>	
Star Formation in the Molecular Cloud Associated with the Monkey Head Nebula: Sequential or Spontaneous? .....	41
<i>J. O. Chibueze, K. Imura, T. Omodaka, T. Handa, T. Nagayama, K. Fujisawa, K. Sunada, M. Nakano, T. Kamezaki &amp; Y. Yamaguchi</i>	
Birthplace of 6.7 GHz methanol masers.....	42
<i>C.-G. Gan, X. Chen &amp; Z.-Q. Shen</i>	
Molecular Gas Around the Infrared Dust Bubbles .....	43
<i>Y. Gong, R. Mao, M. Fang, J. Sun &amp; D. Lu</i>	
UV and optical spectrum variability of T Tau and RY Tau.....	44
<i>N. Z. Ismailov, N. Kh. Quliyev, O. V. Khalilov &amp; H. N. Adigezalzade</i>	
VLBI Observations and NH <sub>3</sub> Mapping of the Star-forming Region NGC2264 .....	45
<i>T. Kamezaki, K. Imura, T. Nagayama, T. Omodaka, T. Handa, Y. Yamaguchi, J. O. Chibueze, K. Sunada &amp; M. Nakano</i>	
Star Formation in the Long Filamentary Infrared Dark Cloud at $l \sim 53^\circ.2$ .....	46
<i>H.-J. Kim, B.-C. Koo &amp; C. Davis</i>	
Feedback of outflows in the Taurus Molecular Cloud .....	47
<i>H. Li, D. Li &amp; R. Nan</i>	

Molecular gas and triggered star formation surrounding Wolf-Rayet stars . . . . .	48
<i>T. Liu, Y. Wu &amp; H. Zhang</i>	
Gas Content in the GMC G333: hierarchical structure of turbulence . . . . .	49
<i>N. Lo, M. R. Cunningham, P. A. Jones &amp; L. Bronfman</i>	
Ammonia towards dust clumps in the giant molecular cloud associated with RCW 106 . . . . .	50
<i>V. Lowe, M. R. Cunningham, J. S. Urquhart &amp; S. Horiuchi</i>	
Early stage of star formation in Orion KL . . . . .	51
<i>L. I. Matveyenko, S. S. Sivakon, V. A. Demichev, D. A. Graham, P. J. Diamond &amp; M. G. Abrahamyan</i>	
Filamentary structure formation in the Interstellar Radiation Field (ISRF) . . . . .	52
<i>J. Miao, M. Lieu, P. Cox, T. Kinnear &amp; P. Cornwall</i>	
NIR integral field spectroscopy of high mass young stellar objects . . . . .	53
<i>K. Murakawa, S. L. Lumsden, R. D. Oudmaijer, B. Davies &amp; M. G. Hoare</i>	
The Roles of Protostellar Outflow Feedback in Clustered Star Formation . . . . .	54
<i>F. Nakamura &amp; Z.-Y. Li</i>	
Atomic and Molecular Gas in M17 SW . . . . .	55
<i>J. P. Pérez-Beaupuits, J. Stutzki, R. Güsten, V. Ossenkopf &amp; H. Wiesemeyer</i>	
Evolution of HII Regions around Massive YSOs . . . . .	56
<i>I. W. Stephens, L. W. Looney, R. Indebetouw, Y.-H. Chu, R. A. Gruendl, C.-H. R. Chen, J. P. Seale &amp; J. M. Evans</i>	
Large column densities and [CII] 158 $\mu\text{m}$ self-absorption in Orion B . . . . .	57
<i>J. Stutzki, U. U. Graf, R. Simon, S. W. J. Colgan, X. Guan, R. Güsten &amp; C. E. Honingh</i>	
Propagation of Highly Efficient Star Formation in the North American Nebula (NGC 7000) . . . . .	59
<i>H. Toujima, T. Handa, T. Omodaka, T. Nagayama, H. Kobayashi &amp; Y. Koyama</i>	
Wiggling Structures Along the NGC 1333 IRAS 2A Outflow . . . . .	60
<i>C.-H. Tsai, H.-R. Chen, C.-F. Lee, N. Hirano &amp; H. Shang</i>	
High-resolution Ammonia Mapping of the Protostellar Core Cha-MMS1 . . . . .	61
<i>M. Väisälä, J. Harju, M. Mantere, O. Miettinen &amp; M. Walmsley</i>	
Formaldehyde observations at XAO . . . . .	62
<i>G. Wu, J. Esimbek, J.-J. Zhou &amp; W.-G. Ji</i>	
Possible triggered star formation associated with SNR G59.5+0.1 . . . . .	63
<i>J.-L. Xu &amp; J.-J. Wang</i>	
YSOs in Taurus-Auriga-Perseus and Orion . . . . .	64
<i>S. Zahorecz, L. V. Tóth, G. Marton, T. Onishi, L. G. Balázs, O. Fehér, A. Kawamura, Y. Kitamura, M. Lisztes, A. Nishimura, L. Pásztor, S. Pintér, I. Rácz, M. Tamura, R. M. D. Sese &amp; M. Ueno</i>	

Triggered Star Formation from Bubbles S51, N68, and N131 . . . . .	65
<i>C. P. Zhang &amp; J. J. Wang</i>	
Clumps in Lynds 935 . . . . .	66
<i>S. Zhang, Y. Xu &amp; J. Yang</i>	
Massive Star Formation: Radiation Transfer Modeling and Multiwavelength Observation . . . . .	67
<i>Y. Zhang, J. Tan, C. McKee &amp; J. De Buizer</i>	
A Molecular Line Survey of CRL 2688 at 1 mm and 3 mm Wavelengths . . . . .	68
<i>Y. Zhang, S. Kwok, J.-i. Nakashima &amp; D.-V-Trung</i>	
<b>Session 2: Molecular Clouds: Distribution, Large-scale Properties, Formation, Evolution</b>	
The Molecular Cloud Population of the Large Magellanic Cloud . . . . .	71
<i>T. Wong, A. Hughes, J. Ott, J. L. Pineda, E. Muller and the MAGMA collaboration</i>	
The Central Molecular Zone with Mopra . . . . .	75
<i>M. G. Burton &amp; P. A. Jones</i>	
The Methanol Multibeam Survey: a unique window on high-mass star formation in our Galaxy . . . . .	79
<i>J. L. Caswell</i>	
The Supershell-Molecular Cloud Connection in the Milky Way and Beyond . . . . .	83
<i>J. R. Dawson, N. M. McClure-Griffiths, Y. Fukui, J. Dickey, T. Wong, A. Hughes &amp; A. Kawamura</i>	
Modes of star formation from Herschel . . . . .	87
<i>L. Testi, E. Bressert &amp; S. Longmore</i>	
From Gas to Stars: Simulating a Population of GMCs . . . . .	91
<i>N. J. Goldbaum &amp; M. R. Krumholz</i>	
From Gas to Stars in Energetic Environments: Dense Gas Clumps in the 30 Doradus Region . . . . .	95
<i>C. N. Anderson, D. S. Meier, J. Ott, A. Hughes &amp; T. Wong</i>	
Magnetohydrodynamic Simulations of the Interaction of Magnetic Tower Jets with Interstellar Clouds including Cooling . . . . .	96
<i>Y. Asahina, T. Ogawa &amp; R. Matsumoto</i>	
Supernova Remnants in Starburst Regions . . . . .	97
<i>A. I. Asvarov</i>	
The star formation rate in the inner Milky Way Galaxy . . . . .	98
<i>O. Cavichia, M. Mollá, R. D. D. Costa &amp; W. J. Maciel</i>	
The origin and evolution of dense regions in the ISM, and their role in spectral features . . . . .	99
<i>D. Falceta-Gonçalves</i>	

UKIRT Widefield Infrared Survey for H <sub>2</sub> . . . . .	100
<i>D. Froebrich, G. Ioannidis and UWISH2 Survey Team</i>	
The density model of the Milky Way from the tangent-point measurements of the rotation curve . . . . .	101
<i>O. Golubov &amp; A. Just</i>	
AMANOGAWA-2SB survey: a northern galactic plane survey in <sup>12</sup> CO ( $J = 2 - 1$ ) and <sup>13</sup> CO ( $J = 2 - 1$ ) with the Amanogawa telescope . . . . .	102
<i>T. Handa, T. Yoda, K. Kohno, T. Nakajima, J.-i. Morino, Y. Yonekura, H. Ogawa, K. Kimura &amp; K. Dobashi</i>	
Similarity and randomness in the molecular clouds associated with Spitzer GLIMPSE Extended Green Objects (EGOs) . . . . .	103
<i>J. H. He, S. Takahashi &amp; X. Chen</i>	
First Census of Galactic Molecular Clouds . . . . .	104
<i>A. S. Hojaev, A. A. Kovaleva &amp; N. R. Alimova</i>	
The disk targets for LAMOST pilot survey . . . . .	105
<i>J. L. Hou, J. Zhong, L. Chen, J. C. Yu, C. Liu &amp; L. C. Deng</i>	
The spiral structure of our Milky Way . . . . .	106
<i>L. G. Hou &amp; J. L. Han</i>	
Submillimeter-wave Observations of Complex Organic Molecules in Southern Massive Star Forming Regions . . . . .	107
<i>K. Kamegai, T. Sakai, N. Sakai, T. Hirota &amp; S. Yamamoto</i>	
TRAO <sup>13</sup> CO Outer Galaxy Survey . . . . .	108
<i>Y. Lee, Y. S. Kim, H. W. Kang, J. H. Jung, C. H. Lee, I. S. Yim, B. G. Kim, H. G. Kim &amp; K. T. Kim</i>	
Infrared observation of Mira variables and their galactic distribution . . . . .	109
<i>R. Miyanoshita, T. Omodaka, T. Handa, T. Kamezaki, C. Nakai &amp; H. Fujiwara</i>	
MAGMA-SMC: The Molecular Cloud Survey of the SMC . . . . .	110
<i>E. Muller, T. Wong, A. Hughes, J. Ott, J. L. Pineda and the MAGMA collaboration</i>	
H <sub>2</sub> CO Observations Towards CH <sub>3</sub> OH Maser Sources . . . . .	111
<i>D. Okoh, J. Esimbek, J. J. Zhou, X. Tang, A. Chukwude, J. Urama &amp; P. Okeke</i>	
Young Stellar Objects in the Low-Metallicity Small Magellanic Cloud . . . . .	112
<i>M. Sewiło, L. R. Carlson, J. P. Seale, R. Indebetouw, M. Meixner, B. A. Whitney, T. R. Robitaille, J. M. Oliveira &amp; K. Gordon</i>	
Pattern analysis of young stellar clusters . . . . .	113
<i>L. V. Tóth, S. Zahorecz, G. Marton, T. Onishi, L. G. Balázs, O. Fehér, A. Kawamura, Y. Kitamura, M. Lisztes, A. Nishimura, L. Pásztor, S. Pintér, I. Racz, M. Tamura &amp; M. Ueno</i>	

The Environmental Effect of the CMF in the Galactic Center 50 km s <sup>-1</sup> Molecular Cloud.....	114
<i>M. Tsuboi &amp; A. Miyazaki</i>	
Herschel Galactic Cold Cloud Core Analysis.....	115
<i>E. Verebelyi &amp; L. Pagani</i>	
Different Evolutionary Stages in the Massive Star-forming Complex W3 Main .....	116
<i>Y. Wang, H. Beuther, Q. Zhang, A. Bik, J. A. Rodón, Z. Jiang &amp; C. Fallscheer</i>	
<b>Session 3: Atomic and Molecular Gas in Galaxies: Nearby Dwarfs, Spirals, Early-types, Starbursts</b>	
Molecular gas and dust in spiral galaxies ( <i>Invited Review</i> ).....	119
<i>C. D. Wilson</i>	
The ISM of Low Metallicity Galaxies: The Herschel view ( <i>Invited Review</i> ) .....	127
<i>S. C. Madden, A. Rémy, F. Galliano, M. Galametz, G. Bendo, D. Cormier, V. Lebouteiller, S. Hony and Herschel SAG 2 consortium</i>	
Results of the IRAM M33 Large Program.....	135
<i>J. Braine, K. Schuster, P. Gratier &amp; C. Druard</i>	
An Updated View of Giant Molecular Clouds, Gas Flows and Star Formation in M51 with PAWS.....	139
<i>S. E. Meidt, E. Schinnerer, A. Hughes, D. Colombo, J. Pety, S. García-Burillo, A. Leroy, C. L. Dobbs, K. F. Schuster, C. Kramer, G. Dumas &amp; T. Thompson</i>	
Molecular Gas and Dust in Nearby Galactic Centers: from SMA to ALMA ( <i>Invited</i> )	143
<i>K. Sakamoto</i>	
Environmental effects on the atomic gas content of galaxies in the local universe	149
<i>C. Li</i>	
Clues from star-formation histories - does the formation scenario of S0 galaxies depend on their luminosities? .....	153
<i>S. Barway, Y. Wadadekar, K. Vaghmare &amp; A. Kembhavi</i>	
Stellar Population Analysis on a Large Sample of Low Surface Brightness Galaxies	154
<i>X. Chen, A. Luo &amp; Y. Liang</i>	
Morphology, Kinematics and Star Formation in Spiral Galaxies in the <i>Spitzer Survey of Stellar Structure in Galaxies</i> (S <sup>4</sup> G) .....	155
<i>S. Erroz-Ferrer, J. H. Knapen, J. Font, J. E. Beckman and the S<sup>4</sup>G team</i>	
Statistical Properties of Highly Luminous HII Regions in the Interacting Zone of the Antennae Galaxies, and Comparison with the Molecular Cloud Component	156
<i>J. Font, J. E. Beckman, J. Zaragoza, S. Erroz-Ferrer &amp; B. García-Lorenzo</i>	
Molecular gas and star formation in extreme starbursts at low redshift .....	157
<i>T. S. Gonçalves, A. Basu-Zych, S. Borthakur, A. Baker, K. Sheth, R. Overzier &amp; D. C. Martin</i>	

The detailed nature of active central cluster galaxies . . . . .	158
<i>S. I. Loubser &amp; I. K. Soechting</i>	
Study of the Byurakan-IRAS galaxy sample . . . . .	159
<i>A. M. Mickaelian &amp; G. S. Harutyunyan</i>	
Photometry and Stellar Structure Analysis of the Central Regions of the M33 galaxy . . . . .	160
<i>F. Nikzat, A. Javadi, M. T. Mirtorabi, J. T. van Loon &amp; H. Khosroshahi</i>	
HI and optical studies of Wolf-Rayet galaxies . . . . .	161
<i>A. Omar &amp; S. Jaiswal</i>	
A search for intervening HI absorption . . . . .	162
<i>S. N. Reeves, E. M. Sadler, J. R. Allison, B. S. Koribalski &amp; S. J. Curran</i>	
Revealing the Physical Properties of GMC Complexes in the Spiral Arms of NGC 6946 . . . . .	163
<i>S. Topal, E. Bayet, M. Bureau, W. Walsh &amp; T. A. Davis</i>	
Colour and stellar population gradients of galaxies in poor groups of galaxies . . . . .	164
<i>J. Vennik &amp; T. Kuutma</i>	
Expanding the Horizon of Molecular Gas Surveys of Nearby Galaxies . . . . .	165
<i>Z. Wang, X. Jiang &amp; L. Watson</i>	
Internal kinematics and physical properties of HII regions in the Arp 270 system	166
<i>J. Zaragoza, J. Font, J. Blasco, J. E. Beckman &amp; B. García</i>	
<b>Session 4: Atomic and Molecular Gas in Galaxies: Cooling Flows, Radio Galaxies, High-redshift Galaxies, Epoch of Reionisation</b>	
Brightest Cluster Galaxies & Cooling Flows ( <i>Invited</i> ) . . . . .	169
<i>P. Salomé</i>	
Radio and Submillimeter Continuum Observations of High-Redshift Galaxies ( <i>Invited</i> ) . . . . .	175
<i>W.-H. Wang, A. J. Barger, L. L. Cowie, C.-C. Chen, J. P. Williams &amp; F. N. Owen</i>	
Obscured quasars: the link between star-formation and black hole activity . . . . .	181
<i>V. Mainieri, A. Bongiorno and the COSMOS team</i>	
Star Formation in Quasar Host Galaxies at Redshift 6: Millimeter Surveys and New Insights from ALMA . . . . .	184
<i>R. Wang, J. Wagg, C. L. Carilli, F. Walter, X. Fan, F. Bertoldi, D. A. Riechers, A. Omont, K. M. Menten, P. Cox, M. A. Strauss &amp; D. Narayanan</i>	
Probing the cool ISM in galaxies via 21 cm HI absorption . . . . .	188
<i>J. R. Allison, E. M. Sadler, S. J. Curran &amp; S. N. Reeves</i>	
Shards of SHARDS: emission line galaxies . . . . .	189
<i>A. Cava, V. Villar, P. G. Pérez-González and the SHARDS Team</i>	

Statistical Properties of Gamma-Ray Burst Host Galaxies . . . . .	190
J. M. Chen, L. W. Jia & E. W. Liang	
The Connection between Starburst and AGN Activities Probed with the $3.3\mu\text{m}$ PAH Emission . . . . .	191
J. H. Kim, M. Im, J.-H. Woo, D. Kim, AMUSES Team, and LQSONG Team	
Molecular Gas and Star-formation in Selected H-ATLAS SDP Lensed SMGs . . . . .	192
L. L. Leeuw, D. A. Riechers, J. M. Carpenter, M. Negrello, R. J. Ivison and H-ATLAS Lensing and Core	
Influence of AGN on the properties of galaxies during the (U)LIRG phase . . . . .	193
M.-Y. Lin, S. Foucaud & Y. Hashimoto	
Morphologies and Substructures of UV Star-Forming Galaxies at Intermediate-z	194
E. N. Voyer, D. F. de Mello, S. M. Blevins, H. I. Teplitz, J. P. Gardner, B. D. Siana & E. Soto	
Adaptive optics imaging of QSO UM402 field . . . . .	195
Y. P. Wang, T. Yamada, I. Tanaka, M. Iye & T. Ji	
Probing the black hole - bulge relationship at high redshift with CO molecular lines	196
X.-B. Wu	
<b>Session 5: ISM Diagnostics: Physical Conditions, Excitation Mechanisms, Chemistry, Atomic-Molecular Transition</b>	
Molecules as tracers of galaxy evolution ( <i>Invited Review</i> ) . . . . .	199
S. Aalto	
The molecular gas in Luminous Infrared Galaxies: a new emergent picture ( <i>Invited</i> )	209
P. P. Papadopoulos, Z.-Y. Zhang, A. Weiss, P. van der Werf, K. Isaak, Y. Gao, M. Xilouris & T. R. Greve	
Diagnostics of the ISM in star formation regions . . . . .	215
W. A. Baan, E. Loenen & X. Lian	
The molecular gas properties in external galaxies . . . . .	219
E. Bayet, S. Viti, M. Bureau, R. Aladro, D. Williams, T. Davis, S. Martin, L. Young & A. Crocker	
Molecular richness of the diffuse interstellar medium: a signpost of turbulent dissipation . . . . .	223
E. Falgarone, B. Godard, G. P. des Forêts & M. Gerin	
Star Formation and the Atomic-Molecular Transition ( <i>Invited Review</i> ) . . . . .	227
M. R. Krumholz	
GOT C+ Survey of [CII] $158\mu\text{m}$ Emission: Atomic to Molecular Cloud Transitions in the Inner Galaxy . . . . .	235
T. Velusamy, W. D. Langer, K. Willacy, J. L. Pineda & P. F. Goldsmith	
Densitometry of Active Star Forming Galaxies . . . . .	239
C. Henkel, J. G. Mangum, J. Darling & K. M. Menten	

Complete Ionisation of the Neutral Gas in High Redshift Radio Galaxies and Quasars . . . . .	243
<i>S. J. Curran &amp; M. T. Whiting</i>	
Chemical complexity and star-formation in merging galaxies . . . . .	244
<i>T. A. Davis, A. Heiderman, D. Iono and the VIXENS team</i>	
The roles of atomic and molecular gas on the redshift evolution of star formation and metallicity in galaxy formation models . . . . .	245
<i>J. Fu &amp; G. Kauffmann</i>	
Experiments on molecular hydrogen formation on cold ISM dust . . . . .	246
<i>L. Gavilan, J. L. Lemaire &amp; G. Vidali</i>	
Spatial Variations and Evolution of PAH, Gas, and Dust Properties in Nearby Major Mergers . . . . .	247
<i>S. Haan</i>	
Quantum IR line list of NH <sub>3</sub> and isotopologues for ISM and dwarf studies . . . . .	248
<i>X. Huang, D. W. Schwenke, T. J. Lee, K. Sung &amp; L. R. Brown</i>	
A Herschel Spectroscopic Survey of Warm Molecular Gas in Local Infrared Luminous Galaxies . . . . .	249
<i>N. Lu, Y. Zhao, C. K. Xu, Y. Gao and the GOALS FTS Team</i>	
Chemical evolution and spectroscopy of some complex molecules which could be treated as the precursor of some bio-molecules in the interstellar medium . . . . .	250
<i>L. Majumdar, A. Das, S. K. Chakrabarti &amp; S. Chakrabarti</i>	
An ALMA and ATCA Molecular Line Survey Toward Centaurus A . . . . .	251
<i>J. Ott, M. McCoy, D. Meier, et al.</i>	
Molecular Cores in Taurus: Evolution and Dynamics . . . . .	252
<i>L. Qian, D. Li &amp; P. Goldsmith</i>	
Spatial Variation of CO Excitation in High-z Galaxies . . . . .	253
<i>C. E. Sharon, A. J. Baker, A. I. Harris, D. Lutz &amp; L. J. Tacconi</i>	
Testing Evolutionary Models of Dwarf Irregular Galaxies through Gas and Stellar Metallicity Determinations in HII Galaxies . . . . .	254
<i>P. Westera, F. Cuisinier, D. Curty &amp; R. Buser</i>	
Rotationally Excited H <sub>2</sub> in the Magellanic Clouds . . . . .	255
<i>R. Xue, D. Welty &amp; T. Wong</i>	
A <i>Herschel</i> Survey of the [N II] 205 μm Emission in Local Infrared Luminous Galaxies . . . . .	256
<i>Y. Zhao, N. Lu, C. K. Xu, Y. Gao and GOALS FTS Team</i>	
<b>Session 6: ISM Diagnostics: Dust</b>	
ISM Diagnostics: Dust ( <i>Invited Review</i> ) . . . . .	259
<i>T. Onaka</i>	
Global Dust Budgets of the Magellanic Clouds . . . . .	267
<i>M. Matsuura</i>	

<i>Contents</i>	xiii
Processing of Interstellar Dust Grains in Galaxies Revealed by AKARI..... <i>H. Kaneda, D. Ishihara, K. Kobata, T. Kondo, M. Yamagishi, A. Yasuda, T. Onaka, I. Sakon &amp; T. Suzuki</i>	271
The rapid evolution of dust content in galaxies over the last five billion years... <i>H. L. Gomez, L. Dunne, D. J. B. Smith &amp; E. da Cunha</i>	275
Evolution of ISM Contents of Massive Galaxies from $z = 2$ to 0.3 ..... <i>N. Scoville</i>	279
Gas and attenuation in galaxies ..... <i>M. Boquien, A. Boselli &amp; V. Buat</i>	283
Analysis of the Interstellar Medium Properties of the <i>Herschel</i> Reference Survey Galaxies..... <i>L. Ciesla and the SAG2 Consortium</i>	284
The Herschel view on the dust properties of the Large Magellanic Cloud .....	285
<i>F. Galliano</i>	
The Mid-IR Extinction Law in the LMC..... <i>J. Gao, M. Xue &amp; B. W. Jiang</i>	286
Expulsion of Dust from Young Stellar Clusters..... <i>P. Grobsøl &amp; H. Dottori</i>	287
The Origin of Unidentified Infrared Emission Features in Galaxies..... <i>S. Kwok</i>	288
GOODS- <i>Herschel</i> : Dust attenuation up to $z \sim 4$ ..... <i>M. Pannella, D. Elbaz &amp; E. Daddi</i>	289
The effects of dust on the derived photometric parameters of disks and bulges in spiral galaxies .....	290
<i>B. A. Pastrav, C. C. Popescu, R. J. Tuffs &amp; A. E. Sansom</i>	
Dust reddening in star-forming galaxies..... <i>T. Xiao, T. Wang, H. Wang, H. Zhou, H. Lu &amp; X. Dong</i>	291
<b>Session 7: Star Formation: Tracers, Scaling Relations, Efficiency, Modeling</b>	
[FeII] as a shock tracer in NGC 253 .....	295
<i>M. J. F. Rosenberg, P. P. van der Werf &amp; F. P. Israel</i>	
Gas, Dust and Star Formation in Nearby Galaxies as Seen with the JCMT .....	299
<i>J. R. Sánchez-Gallego</i>	
Star Formation Efficiency at Intermediate Redshift .....	303
<i>F. Combes, S. García-Burillo, J. Braine, E. Schinnerer, F. Walter, L. &amp; Colina</i>	
Resolved Schmidt-Kennicutt Relation for Star Forming Regions in the Galaxy and Magellanic Clouds .....	307
<i>C.-H. R. Chen, R. Indebetouw, E. Muller, M. Messineo, K. M. Menten and the SAGE-SMC Team</i>	

The Star Formation Relation in Nearby Galaxies ( <i>Invited Review</i> ) . . . . .	311
<i>A. Schruba</i>	
Star formation laws in extreme starbursts . . . . .	319
<i>S. García-Burillo, A. Usero &amp; A. Alonso-Herrero</i>	
Probing the star-formation modes in merging galaxies . . . . .	323
<i>P.-A. Duc, P.-E. Belles, E. Brinks &amp; F. Bournaud</i>	
Comparison of NIR and H $\alpha$ emission from the HII regions of M100 . . . . .	327
<i>S. J. Chan &amp; J. E. Beckman</i>	
When the Largest Spiral is Formed . . . . .	328
<i>R. T. Eufrasio, D. F. de Mello, F. Urrutia-Viscarra, C. M. de Oliveira &amp; E. Dwek</i>	
Anatomy of Starbursts in Extragalactic Giant HII Regions: M51 Case Study . . . . .	329
<i>J. M. Evans &amp; Y.-H. Chu</i>	
Fitting the spectral energy distributions of galaxies with CIGALE : Code Investigating GALaxy Emission . . . . .	330
<i>E. Giovannoli &amp; V. Buat</i>	
The Schmidt-Kennicutt Law of Matched-Age Star Forming Regions . . . . .	331
<i>S. Komugi, K. Tateuchi, K. Motohara, T. Takagi, D. Iono, H. Kaneko, J. Ueda, T. R. Saitoh, and the miniTAO team</i>	
A Fundamental Plane for GAMA galaxies . . . . .	332
<i>M. A. Lara-López, A. M. Hopkins, A. R. López-Sánchez, and the GAMA team</i>	
Using the Milky Way as a template for understanding star formation in extreme environments across cosmological timescales . . . . .	333
<i>S. N. Longmore</i>	
Connection between the Star Formation Rate and the Gamma-Ray Bursts . . . . .	334
<i>A. Mészáros, Z. Bagoly, L. G. Balázs &amp; I. Horváth</i>	
The Resolved Kennicutt-Schmidt Law in Nearby Galaxies . . . . .	335
<i>R. Momose, J. Koda, R. C. Kennicutt, Jr, F. Egusa, S. K. Okumura, D. Calzetti, G. Liu, J. Donovan Meyer, N. Z. Scoville, T. Sawada &amp; N. Kuno</i>	
Stochastic star formation and early galactic nucleosynthesis . . . . .	336
<i>L. Nguyen &amp; G. Mathews</i>	
Multi-wavelength Studies of Cluster Star Forming Galaxies at z~0.54 . . . . .	337
<i>S. M. Randriamampandry, S. M. Crawford, C. M. Cress, K. M. Hess, E. Giovannoli &amp; M. Vaccari</i>	
Off-nuclear starburst in a triple merger . . . . .	338
<i>P. Väisänen, J. Reunanen, J. Kotilainen &amp; S. Mattila</i>	
Ly $\alpha$ vs. fundamental properties of galaxies . . . . .	339
<i>A. Wofford, C. Leitherer, J. Salzer, and COS Science Team</i>	

Binary interactions and SFR calibrations . . . . .	340
<i>F. Zhang, L. Li &amp; Z. Han</i>	
<b>Session 8: Feedback: Stellar Feedback, AGN Feedback, Gas Accretion, Outflows</b>	
Feedback and Outflows ( <i>Invited Review</i> ) . . . . .	343
<i>N. Murray</i>	
Molecular gas in galaxies: much more than just the fuel of star formation ( <i>Invited</i> )	351
<i>N. Nesvadba, F. Boulanger, C. Herrera, P. Guillard, M. Lehnert, P. Salome &amp; E. Falgarone</i>	
Radiation-driven Feedback to the ISM around AGNs ( <i>Invited</i> ) . . . . .	357
<i>K. Wada</i>	
Measuring AGN Feedback Parameters From Seyfert Galaxy Outflows . . . . .	363
<i>F. Müller-Sánchez, M. Malkan, E. K. S. Hicks &amp; R. I. Davies</i>	
Far-Ultraviolet Observations of Outflows from Infrared-Luminous Galaxies . . . . .	367
<i>C. Leitherer, R. Chandar, C. A. Tremonti &amp; A. Wofford</i>	
Quenching of Star Formation in Molecular Outflow Host NGC 1266 . . . . .	371
<i>K. Alatalo, K. E. Nyland, G. Graves, S. Deustua, L. M. Young, T. A. Davis, A. F. Crocker, M. Bureau, E. Bayet, L. Blitz, M. Bois, F. Bournaud, M. Cappellari, R. L. Davies, P. T. de Zeeuw, E. Emsellem, S. Khochfar, D. Krajnovic, H. Kuntschner, R. M. McDermid, R. Morganti, T. Naab, T. Oosterloo, M. Sarzi, N. Scott, P. Serra &amp; A. Weijmans</i>	
Detecting Gas Outflows in Type-2 AGNs Selected from the Sloan Digital Sky Survey . . . . .	372
<i>H.-J. Bae, J.-H. Woo &amp; S. Oh</i>	
Do AGN suppress star formation in disc-dominated galaxies? . . . . .	373
<i>B. Husemann, J. Walcher, L. Wisotzki, J. Gerssen, K. Jahnke, S. F. Sánchez &amp; V. Wild</i>	
AGN feedback on the ISM of 3C 236 . . . . .	374
<i>A. Labiano, S. García-Burillo, F. Combes, A. Usero, R. Soria-Ruiz, G. Tremblay, R. Neri, A. Fuente, R. Morganti &amp; T. Oosterloo</i>	
Effects of large-scale AGN feedback in local galaxies . . . . .	375
<i>S. Shabala, S. Kaviraj &amp; J. Silk</i>	
A 22 $\mu$ m selected sample from WISE and SDSS spectra catalogs . . . . .	376
<i>X.-Q. Wen &amp; H.-W. Yin</i>	
Conference summary ( <i>Invited Review</i> ) . . . . .	377
<i>Y. Fukui</i>	
Author index . . . . .	382