

Ho Seong Hwang Curriculum Vitae

Research Professor Quantum Universe Center, Korea Institute for Advanced Study (KIAS), 85 Hoegiro, Dongdaemun-gu, Seoul 02455, Republic of Korea	Tel : +82-2-958-2515 Fax : +82-2-958-3870 E-mail : hhwang@kias.re.kr https://astro.kias.re.kr/~hshwang/
---	---

1. Education

- Aug. 2007:** Ph.D. in Astronomy, Seoul National University, Korea (**Advisor** : Myung Gyoon Lee)
Thesis: Dynamics of Galaxy Clusters in Wide-field Galaxy Surveys
- Feb. 2001:** B.S. in Physics, Korea Advanced Institute of Science and Technology (KAIST), Korea

2. Positions

- 2014/09 – Present:** Research Professor, Korea Institute for Advanced Study (KIAS), Korea
- 2011/10 – 2014/08:** Research Fellow, Harvard-Smithsonian Center for Astrophysics, USA
- 2009/05 – 2011/09:** Research Fellow, CEA Saclay, France
- 2007/09 – 2009/04:** Research Fellow, KIAS, Korea
- 2004/12 – 2005/04:** Visiting Research Associate, School of Physical Sciences, University of Kent, UK
- 2001/03 – 2003/02:** Teaching Assistant, Seoul National University, Korea

3. Research Interests

- Large-scale Structures in the Universe
- Observational Cosmology
- Galaxy Formation and Evolution
- Formation of Galaxy Clusters/Groups
- Environmental Effects on Galaxy Properties
- Infrared Luminous Galaxies
- Galaxy Interactions and Mergers
- Globular Cluster Systems in Galaxies

4. References

Dr. Margaret Geller	Smithsonian Astrophysical Observatory, USA	mgeller@cfa.harvard.edu
Dr. Daniel Fabricant	Smithsonian Astrophysical Observatory, USA	dfabricant@cfa.harvard.edu
Dr. David Elbaz	CEA Saclay, France	delbaz@cea.fr
Prof. Changbom Park	Korea Institute for Advanced Study, Korea	cbp@kias.re.kr
Prof. Myung Gyoon Lee	Seoul National University, Korea	mglee@astro.snu.ac.kr

5. Observing Experience

- **Optical/Near-IR Imaging:** MMT/MMTcam, AKARI/IRC, BOAO, SOAO
- **Optical/Near-IR Spectroscopy:** Gemini-S/GMOS, MMT/Hectospec, FLWO/FAST, CTIO/R-C SPec., CFHT/MOS, AKARI/IRC
- **Mid/Far-IR, Submillimeter and Radio observations:** SMA, Herschel/PACS/SPIRE, AKARI/IRC

6. Talks in the last 2 years

6.1. Conferences / Colloquia

- 2017/11/28** “HectoMAP and Horizon Run 4: Over- and Under-dense Large-scale Structures in the Real and Simulated Universe”, Harvard-Smithsonian Center for Astrophysics, USA (Galaxies and Cosmology Seminar)
- 2017/10/12** “HectoMAP and Horizon Run 4: Over- and Under-dense Large-scale Structures in the Real and Simulated Universe”, Yeosu Convention Center, Korea (2017 Fall KAS meeting)

- 2017/09/20** “*Testing the Standard Model of Cosmology with Large-scale Structures in the Real and Simulated Universe*”, Yukawa Institute for Theoretical Physics (YITP), Japan (KIAS-YITP joint workshop 2017)
- 2017/09/12** “*HectoMAP and Horizon Run 4: Dense Structures and Voids in the Real and Simulated Universe*”, Institut d’Astrophysique de Paris (IAP), France (Journal-club Universe)
- 2017/07/10** “*The KIAS redshift survey of nearby galaxy clusters: COMA and more*”, Resom Forest Resort, Korea (2017 CLEVOR-GEM Joint Workshop)
- 2017/07/06** “*HectoMAP and Horizon Run 4: Over- and Under-dense Large-scale Structures in the Real and Simulated Universe*”, Taipei International Convention Center, Taiwan (2017 Asia-Pacific Regional IAU Meeting)
- 2017/06/28** “*Summary of Subaru International Partnership Science and Instrumentation Workshop*”, Daea-Ulleung Resort, Korea (The 6th Survey Science Group Workshop)
- 2017/06/02** “*HectoMAP and Horizon Run 4: A Cosmological Test with Large-scale Structures at Intermediate Redshifts*”, Yonsei University, Korea (Astronomy Colloquium Talk)
- 2017/03/23** “*Mapping the Galaxy Distribution in and around Galaxy Clusters*”, NAOJ, Japan (Subaru International Partnership Science and Instrumentation Workshop)
- 2017/03/03** “*Galaxy Redshift Surveys with MMT/Hectospec: Galaxy Groups/Clusters and Large-scale Structure of the Universe*”, KASI, Korea (2017 Medium/Large Telescope Users Meeting)
- 2016/12/16** “*Multiwavelength Galaxy Surveys: New Opportunities*”, Konjiam Resort, Korea (Survey Science Group Meeting on Multiwavelength Studies of External Galaxies)
- 2016/11/09** “*Cosmic Address and Large-scale structure of the Universe*”, KIAS, Korea (QUC Workshop 2016)
- 2016/11/01** “*HectoMAP and Horizon Run 4: A cosmological test with large-scale structures at intermediate redshifts*”, KIAS, Korea (The 7th KIAS Workshop on Cosmology and Structure Formation)
- 2016/10/18** “*Science with Local Infrared Galaxies: DOGs in our backyard*”, Shanghai, China (JINGLE team meeting)
- 2016/09/29** “*HectoMAP and Horizon Run 4: A Cosmological Test with Large-scale Structures at Intermediate Redshifts*”, Seoul National University, Korea (The 10th East Asian Meeting on Astronomy)
- 2016/08/02** “*Mapping the Distribution of Galaxies at Intermediate Redshifts: Galaxy Clusters and Large-scale Structure of the Universe*”, Australian National University, Australia (RSAA Colloquium Talk)
- 2016/07/28** “*Mapping the Distribution of Galaxies at Intermediate Redshifts: Galaxy Clusters and Large-scale Structure of the Universe*”, Australian Astronomical Observatory, Australia (Colloquium Talk)
- 2016/04/08** “*A Cosmological Test with Large-scale Structures at Intermediate Redshifts*”, KASI, Korea (3rd Korea-Japan Workshop on Dark Energy)
- 2016/02/01** “*Current Status of SDSS IV and DESI*”, High 1 Resort, Korea (The 5th Survey Science Group Workshop)

6.2. Public Talks

- 2017/12/08** “*Where am I in the vast Universe?*”, Eunhaeng Chaekmaru Library in Seongnam, Korea (Dream School)
- 2017/11/23** “*Structure of the Universe: Where am I in the vast Universe?*”, Gwacheon National Science Museum, Korea (Science Academy for Parents)
- 2017/06/28** “*Structure of the Universe: Where am I in the vast Universe?*”, Ulleung High School in Ulleung-do, Korea
- 2016/11/25** “*Where am I in the vast Universe?*”, Okgu Middle School in Kunsan, Korea
- 2016/08/11** “*Structure of the Universe: Where am I in the vast Universe?*”, Sobaeksan Optical Astronomy Observatory, Korea (Seodaemun Museum of Natural History Summer Camp)
- 2016/02/16** “*Modern Astronomy: The Past, Present, and Future of the Universe*”, Korea Air Force Academy, Korea (Intensive Astronomy/Universe Program)
- 2016/01/30** “*Sky on a Chip*”, Gwacheon National Science Museum, Korea (Astronomy and Space Camp)

7. List of Publication

- 123 refereed papers in total: 7 submitted, 17 as first author, 24 as second author, and 75 as co-author

7.1. *Refereed Publications, Submitted*

7. **HeCS-red: Dense Hectospec Surveys of redMaPPer-Selected Clusters,**
Rines, K. J., Geller, M. J., Diaferio, A., **Hwang, H. S.**, Sohn, J.,
2017, ApJ, submitted (arXiv:1712.00212)
6. **The HectoMAP Cluster Survey - II. X-ray Clusters,**
Sohn, J., Chon, G., Böhringer, H., Geller, M. J., Diaferio, A., **Hwang, H. S.**, Utsumi, Y., Rines, K. J.,
2017, ApJ, submitted (arXiv:1712.00029)
5. **The HectoMAP Cluster Survey - I. redMaPPer Clusters,**
Sohn, J., Geller, M. J., Rines, K. J., **Hwang, H. S.**, Utsumi, Y., Diaferio, A.,
2017, ApJ, submitted (arXiv:1712.00872)
4. **A Study of Environmental Effects on Galaxy Spin using MaNGA data,**
Lee, J. C., **Hwang, H. S.**, Chung, H.,
2017, MNRAS, submitted
3. **JINGLE, a JCMT legacy survey of dust and gas for galaxy evolution studies: I. Survey overview and first results,**
Saintonge, A. et al. (**Hwang, H. S.**),
2017, MNRAS, submitted
2. **Evolution of Late-type Galaxies in Cluster Environment: Effects of High-speed Multiple Encounters with Early-type Galaxies,**
Hwang, J.-S., Park, C., Banerjee, A., **Hwang, H. S.**,
2017, ApJ, submitted
1. **The Fourteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the extended Baryon Oscillation Sky Survey and from the second phase of the Apache Point Observatory Galactic Evolution Experiment,**
SDSS Collaboration (**Hwang, H. S.**),
2017, ApJS, submitted (arXiv:1707.09322)

7.2. *Refereed Publications, First Author*

17. **HectoMAP and Horizon Run 4: Dense Structures and Voids in the Real and Simulated Universe,**
Hwang, H. S., Geller, M. J., Park, C., Fabricant, D. G., Kurtz, M. J., Rines, K. J., Kim, J., Diaferio, A., et al.,
2016, ApJ, 818, 106
16. **Comparing Dense Galaxy Cluster Redshift Surveys with Weak Lensing Maps,**
Hwang, H. S., Geller, M. J., Diaferio, A., Rines, J. K., Zahid, J.,
2014, ApJ, 797, 106
15. **Dust Properties of Local Dust-Obscured Galaxies with the Submillimeter Array,**
Hwang, H. S., Andrews, S. M., Geller, M. J.,
2013, ApJ, 777, 38
14. **Dust-Obscured Galaxies in the Local Universe,**
Hwang, H. S., Geller, M. J.,
2013, ApJ, 769, 116
13. **SHELS: Optical Spectral Properties of WISE 22 μm -selected Galaxies,**
Hwang, H. S., Geller, M. J., Kurtz, M., Dell'Antonio, I., Fabricant, D.,
2012, ApJ, 758, 25
12. **A WISE View of a Nearby Supercluster A2199,**
Hwang, H. S., Geller, M. J., Diaferio, A., Rines, K.,
2012, ApJ, 752, 64
11. **Activity in galactic nuclei of cluster and field galaxies in the local universe,**
Hwang, H. S., Park, C., Elbaz, D., Choi, Y.-Y.,
2012, A&A, 538, 15
10. **GOODS-Herschel: the impact of galaxy-galaxy interactions on the far-infrared properties of galaxies,**
Hwang, H. S., Elbaz, D., Dickinson, M., Charmandaris, V., Daddi, E., GOODS-Herschel team,
2011, A&A, 535, 60

9. **Evolution of Dust Temperature of Galaxies through Cosmic Time as seen by Herschel**,
Hwang, H. S., Elbaz, D., Magdis, G. E., Daddi, E., Symeonidis, M., PEP team, HerMES team, AKARI team
2010, MNRAS, 409, 75
8. **Environmental Dependence of Local Luminous Infrared Galaxies**,
Hwang, H. S., Elbaz, D., Lee, J. C., Jeong, W.-S., Park, C., Lee, M. G., Lee, H. M.,
2010, A&A, 522, 33
7. **Orbital Dependence of Galaxy Properties in Satellite Systems of Galaxies**,
Hwang, H. S., Park, C.,
2010, ApJ, 720, 522
6. **Galaxy Activity in Merging Binary Galaxy Clusters**,
Hwang, H. S., Lee, M. G.,
2009, MNRAS, 397, 2111
5. **Evidence for Morphology and Luminosity Transformation of Galaxies at High Redshifts**,
Hwang, H. S., Park, C.,
2009, ApJ, 700, 791
4. **Galaxy Orbits for Galaxy Clusters in Sloan Digital Sky Survey and 2dF Galaxy Redshift Survey**,
Hwang, H. S., Lee, M. G.,
2008, ApJ, 676, 218
3. **The Globular Cluster System of M60 (NGC 4649). II. Kinematics of the Globular Cluster System**,
Hwang, H. S., Lee, M. G., Park, H. S., Kim, S. C., Park, J.-H., Sohn, Y.-J., Lee, S.-G., Rey, S.-C., et al.
2008, ApJ, 674, 869
2. **Searching for Rotating Galaxy Clusters in SDSS and 2dFGRS**,
Hwang, H. S., Lee, M. G.,
2007, ApJ, 662, 236
1. **The ultraluminous and hyperluminous infrared galaxies in the SDSS, 2dFGRS and 6dFGS**,
Hwang, H. S., Serjeant, S., Lee, M. G., Lee, K. H., White, G. J.,
2007, MNRAS¹, 375, 115

7.3. *Refereed Publications, Second Author*

24. **Demise of Faint Satellites around Isolated Early-type Galaxies**,
Park, C., Hwang, H. S., Park, H., Lee, J. C.,
2017, NatAs², in press (arXiv:1703.02207)
23. **Star Formation Activity of Barred Spiral Galaxies**,
Kim, E., Hwang, H. S., Chung, H., Lee, G.-H., Park, C., Cervantes Sodi, B., Kim, S. S.,
2017, ApJ, 845, 83
22. **A Redshift Survey of the Nearby Galaxy Cluster Abell 2199: Comparison of the Spatial and Kinematic Distributions of Galaxies with the Intracluster Medium**,
Song, H., Hwang, H. S., Park, C., Tamura, T.,
2017, ApJ, 842, 88
21. **The Fastest Galaxy Evolution in an Unbiased Compact Group Sample with WISE**,
Lee, G.-H., Hwang, H. S., Sohn, J., Lee, M. G.,
2017, ApJ, 835, 280
20. **To the Edge of M87 and Beyond: Spectroscopy of Intracluster Globular Clusters and Ultra Compact Dwarfs in the Virgo Cluster**,
Ko, Y., Hwang, H. S., et al.,
2017, ApJ, 835, 212
19. **A Submillimeter Continuum Survey of Local Dust-Obscured Galaxies**,
Lee, J. C., Hwang, H. S., Lee, G.-H.,
2016, ApJ, 833, 188

¹MNRAS: Monthly Notices of the Royal Astronomical Society

²NatAs: Nature Astronomy

18. **SHELS: Complete Redshift Surveys of Two Widely Separated Fields**,
Geller, M. J., **Hwang, H. S.**, Dell'Antonio, I., Zahid, H. J., Kurtz, M. J., Fabricant, D. G.,
2016, ApJS, 224, 11
17. **Compact Groups of Galaxies with Complete Spectroscopic Redshifts in the Local Universe**,
Sohn, J., **Hwang, H. S.**, Geller, M. J., Diaferio, A., Rines, K. J., Lee, M. G., Lee, G.-H.,
2015, JKAS³, 48, 381
16. **Schwarzschild Lecture 2014: HectoMAPping the Universe**, ,
Geller, M. J., **Hwang, H. S.**,
2015, AN⁴, 336, 428
15. **Galaxy Evolution in the Mid-infrared Green Valley: a Case of the A2199 Supercluster**,
Lee, G.-H., **Hwang, H. S.**, Lee, M. G., Sohn, J., Shim, H., Diaferio, A.,
2015, ApJ, 800, 80
14. **The Number Density of Quiescent Compact Galaxies at Intermediate Redshift**,
Damjanov, I., **Hwang, H. S.**, Chilingarian, I., Geller, M. J.,
2014, ApJ, 793, 39
13. **Tracing Recent Star Formation of Red Early-type Galaxies out to $z \sim 1$** ,
Ko, J., **Hwang, H. S.**, Im, M., Le Borgne, D., Lee, J. C., Elbaz, D.,
2014, ApJ, 791, 134
12. **SHELS: A Complete Galaxy Redshift Survey with $R \leq 20.6$** , ,
Geller, M. J., **Hwang, H. S.**, Fabricant, D. G., Kurtz, M. J., Dell'Antonio, I. P., Zahid, J.,
2014, ApJS⁵, 213, 35
11. **A Redshift Survey of the Strong Lensing Cluster Abell 383**,
Geller, M. J., **Hwang, H. S.**, Diaferio, A., Kurtz, M., Coe, D., Rines, J. K.,
2014, ApJ, 783, 52
10. **The Calibration of Star Formation Rate Indicators for WISE Selected Galaxies**,
Lee, J. C., **Hwang, H. S.**, Ko, J.,
2013, ApJ, 774, 62
9. **Activity in Galactic Nuclei of Compact Group Galaxies in the Local Universe**,
Sohn, J., **Hwang, H. S.**, Lee, M. G., Lee, G.-H., Lee, J. C.,
2013, ApJ, 771, 106
8. **The Mid-infrared and Near-Ultraviolet Excess Emissions of Quiescent Galaxies on the Red Sequence**,
Ko, J., **Hwang, H. S.**, Lee, J. C., Sohn, Y.-J.,
2013, ApJ, 767, 90
7. **AKARI Near-Infrared Spectroscopy of Luminous Infrared Galaxies**,
Lee, J. C., **Hwang, H. S.**, Lee, M. G., Kim, M., Lee, J. H.,
2012, ApJ, 756, 95
6. **Optical spectral classification of southern ultraluminous infrared galaxies**,
Lee, J. C., **Hwang, H. S.**, Lee, M. G., Kim, M., Kim, S. C.,
2011, MNRAS, 414, 720
5. **AKARI Near-Infrared Spectroscopy of SDSS-selected Blue Early-type Galaxies**,
Lee, J. H., **Hwang, H. S.**, Lee, M. G., Lee, J. C., Matsuhara, H.,
2010, ApJ, 719, 1946
4. **Herschel Unveils a Puzzling Uniformity of Distant Dusty Galaxies**,
Elbaz, D., **Hwang, H. S.**, Magnelli, B., Daddi, E., Aussel, H., PEP team, HerMES team,
2010, A&A⁶, 518, L29
3. **Interactions of Galaxies in the Galaxy Cluster Environment**,
Park, C., **Hwang, H. S.**,
2009, ApJ, 699, 1595
2. **Wide-Field Survey of Globular Clusters in M31. II. Kinematics of the Globular Cluster System**,
Lee, M. G., **Hwang, H. S.**, Kim, S. C., Park, H. S., Geisler, D., Sarajedini, A., & Harris, W.E.,
2008, ApJ, 674, 886

³JKAS: Journal of Korean Astronomical Society

⁴AN: Astronomische Nachrichten

⁵ApJS: The Astrophysical Journal Supplement Series

⁶A&A: Astronomy & Astrophysics

1. **The Globular Cluster System of M60 (NGC 4649). I. CFHT MOS Spectroscopy and Database**, Lee, M. G., **Hwang, H. S.**, Park, H. S., Park, J.-H., Kim, S. C., Sohn, Y.-J., Lee, S.-G., Rey, S.-C., et al. 2008, ApJ, 674, 857

7.4. *Refereed Publications, Co-Author*

75. **hCOSMOS: a dense spectroscopic survey of $r \leq 21.3$ galaxies in the COSMOS field**, Damjanov, I., Zahid, H. J., Geller, M. J., Fabricant, D. G., **Hwang, H. S.**, 2017, ApJS, in press (arXiv:1710.01733)
74. **The surprisingly large dust and gas content of quiescent galaxies at $z > 1.4$** , Gobat, R., et al. (**Hwang, H. S.**), 2017, NatAs, in press (arXiv:1703.02207)
73. **COSMOS2015 photometric redshifts probe the impact of filaments on galaxy properties**, Laigle, C., Pichon, C., et al. (**Hwang, H. S.**), 2017, MNRAS, in press (arXiv:1702.08810)
72. **Galaxy evolution in the metric of the Cosmic Web**, Kraljic, K., et al. (**Hwang, H. S.**), 2018, MNRAS, 474, 547
71. **The Thirteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-IV Survey MAPPING NEARBY GALAXIES AT APACHE POINT OBSERVATORY**, SDSS Collaboration (**Hwang, H. S.**), 2017, ApJS, 233, 25
70. **An imperfectly passive nature: Bright sub-millimeter emission from dust-obscured star formation in the $z=3.717$ "passive" system ZF20115**, Simpson, J. M., et al. (**Hwang, H. S.**), 2017, ApJL, 844, 10
69. **Galaxy evolution in merging clusters. The passive core of the "Train Wreck" cluster of galaxies, A520**, Deshev, B., et al. (**Hwang, H. S.**), 2017, A&A, 607, 131
68. **Clustering of Extremely Red Objects in the Subaru GTO 2deg² Field**, Shin, J., Shim, H., **Hwang, H. S.**, Ko, J., et al., 2017, JKAS, 50, 60
67. **Sloan Digital Sky Survey IV: Mapping the Milky Way, Nearby Galaxies and the Distant Universe**, SDSS Collaboration (**Hwang, H. S.**), 2017, AJ, 154, 28
66. **The Dependence of the Mass-Metallicity Relation on Large Scale Environment**, Wu, P.-F., Zahid, H. J., **Hwang, H. S.**, Geller, M., 2017, MNRAS, 468, 1881
65. **Dependence of Cluster Galaxy Properties on Dynamical State of Host Clusters**, Kim, J.-W., Ko, J., **Hwang, H. S.**, et al., 2017, ApJ, 836, 105
64. **Separating Galaxies from the Cluster Dark Matter Halo in Abell 611**, Monna, A., Seitz, S. et al. (**Hwang, H. S.**), 2017, MNRAS, 465, 4589
63. **The Scaling of Stellar Mass and Central Stellar Velocity Dispersion for Quiescent galaxies at $z < 0.7$** , Zahid, H. J., Geller, M., Fabricant, D., **Hwang, H. S.**, 2016, ApJ, 832, 203
62. **Compact E+A Galaxies as a Progenitor of Massive Compact Quiescent Galaxies at $0.2 < z < 0.8$** , Zahid, H. J., et al. (**Hwang, H. S.**), 2016, ApJ, 831, 146
61. **Catalogs of Compact Groups of Galaxies from the Enhanced SDSS DR12**, Sohn, J., Geller, M. J., **Hwang, H. S.**, Zahid, H. J., Lee, M. G., 2016, ApJS, 225, 23

60. **The Stellar Mass Fundamental Plane and Compact Quiescent Galaxies at $z < 0.6$,**
Zahid, H. J., Damjanov, I., Geller, M. J., **Hwang, H. S.**, Fabricant, D. G.
2016, ApJ, 821, 101
59. **Stellar Populations of Early-type Galaxies with Mid-infrared Excess Emission,**
Ko, J., Chung, H., **Hwang, H. S.**, Lee, J. C.
2016, ApJ, 820, 132
58. **HeCS-SZ: The Hectospec Survey of Sunyaev-Zeldovich Selected Clusters,**
Rines, K. J., Geller, M. J., Diaferio, A., **Hwang, H. S.**,
2016, ApJ, 819, 63
57. **The Environment of Massive Quiescent Compact Galaxies at $0.1 < z < 0.4$ in the COSMOS Field,**
Damjanov, I., Geller, M. J., Zahid, H. J., **Hwang, H. S.**,
2015, ApJ, 815, 104
56. **SHELS: A Rise in the Ionizing Photons in Star-forming Galaxies between $0.2 < z < 0.6$,**
Kewley, L., Zahid, H. J., Geller, M. J., Dopita, M., **Hwang, H. S.**, Fabricant, D.,
2015, ApJL, 812, 20
55. **The satellite content and quenching of star formation in galaxy groups at $z \sim 1.8$,**
Gobat, R., Daddi, E. et al. (**Hwang, H. S.**),
2015, A&A, 581, 56
54. **Quiescent Compact Galaxies at Intermediate Redshift in the COSMOS field. I. Number Density,**
Damjanov, I., Geller, M. J., Zahid, H. J., **Hwang, H. S.**,
2015, ApJ, 806, 158
53. **GOODS-Herschel : Star Formation, Dust Attenuation and the FIR-Radio Correlation on the Main Sequence of Star-Forming Galaxies up to $z \sim 4$,**
Pannella, M., Elbaz, D., Daddi, E., Dickinson, M., **Hwang, H. S.**, et al.,
2015, ApJ, 807, 141
52. **GOODS-Herschel: resolving the Cosmic Infrared Background by pushing Herschel to its faintest limit up to $500 \mu\text{m}$,**
Leiton, R., Elbaz, D., Okumura, K., **Hwang, H. S.**, et al.,
2015, A&A, 579, 93
51. **Constraining the galaxy mass content in the core of A383: first case study using velocity dispersion measurements for individual cluster members,**
Monna, A., Seitz, S. et al. (**Hwang, H. S.**),
2015, MNRAS, 447, 1224
50. **The Double Galaxy Cluster Abell 2465 II. Star Formation in the Cluster, ,**
Wegner, G. A., Chu, D. S., **Hwang, H. S.**,
2015, MNRAS, 447, 1126
49. **Regularity underlying complexity: a redshift-independent description of the continuous variation of galaxy-scale molecular gas properties in the mass-star formation rate plane,**
Sargent, M., Daddi, E., Bethermin, M., Aussel, H., Magdis, G., **Hwang, H. S.**, et al.,
2014, ApJ, 793, 19
48. **The Universal Relation of Galactic Chemical Evolution: The Origin of the Mass-Metallicity Relation,**
Zahid, J., Dima, G., Kudritzki, R., Kewley, L., Geller, M. J., **Hwang, H. S.**,
2014, ApJ, 791, 130
47. **Measuring Galaxy Velocity Dispersions with Hectospec,**
Fabricant, D., Chilingarian, I., **Hwang, H. S.**, Kurtz, M., Geller, M. J., Dell'Antonio, I., Rines, K.,
2013, PASP, 125, 1362
46. **Intermediate Redshift Massive Compact Galaxies,**
Damjanov, I., Chilingarian, I., **Hwang, H. S.**, Geller, M. J.,
2013, ApJL, 775, 48
45. **The Chemical Evolution of Star-Forming Galaxies Over the Last 11 Billion Years,**
Zahid, J., Geller, M. J., Kewley, L., **Hwang, H. S.**, Fabricant, D., Kurtz, M.,
2013, ApJL⁷, 771, 19

⁷ApJL: The Astrophysical Journal Letters

44. **Release of the deepest Herschel-PACS far-infrared survey: number counts and infrared luminosity functions from combined PEP/GOODS-H observations,**
Magnelli, B., Popesso, P., Berta, S., Pozzi, F, PEP/GOODS-H team (Hwang, H. S.),
2013, A&A, 553, 132
43. **A Survey for Planetary Nebulae in M31 Globular Clusters,**
Jacoby, G. H., Ciardullo, R., De Marco, O., Lee, M. G., Herrmann, K. A., Hwang, H. S., et al.,
2013, ApJ, 769, 10
42. **The Herschel census of infrared SEDs through cosmic time,**
Symeonidis, M., Vaccari, M., Berta, S., et al. (Hwang, H. S.),
2012, MNRAS, 431, 2317
41. **Panchromatic Spectral Energy Distributions of Herschel Sources,**
Berta, S., Lutz, D., Santini, P., Wuyts, S., Rosario, D., et al. (Hwang, H. S.),
2013, A&A, 551, 100
40. **Widespread and Hidden Active Galactic Nuclei in Star-forming Galaxies at redshift >0.3,**
Juneau, S., Dickinson, M., Bournaud, F., et al. (Hwang, H. S.),
2013, ApJ, 764, 176
39. **GOODS-Herschel: Separating High redshift Active Galactic Nuclei and Star Forming Galaxies using Infrared Color Diagnostics,**
Kirkpatrick, A., Pope, A., GOODS-Herschel team (Hwang, H. S.),
2013, ApJ, 763, 123
38. **GOODS-Herschel: radio-excess signature of hidden AGN activity in distant star-forming galaxies,**
Del Moro, A., Alexander, D. M., Mullaney, J. R., GOODS-Herschel team (Hwang, H. S.),
2012, A&A, 549, 59
37. **The Evolving Interstellar Medium of Star Forming Galaxies since $z=2$ as Probed by Their Infrared Spectral Energy Distributions,**
Magdis, G. E., Daddi, E., Bethermin, M., GOODS-Herschel team (Hwang, H. S.),
2012, ApJ, 760, 6
36. **GOODS-Herschel: Impact of Active Galactic Nuclei and Star Formation Activity on Infrared Spectral Energy Distributions at High Redshift,**
Kirkpatrick, A., Pope, A., GOODS-Herschel team (Hwang, H. S.),
2012, ApJ, 759, 139
35. **The Globular Cluster System of NGC 4636 and Formation of Globular Clusters in gE Galaxies,**
Park, H. S., Lee, M. G., Hwang, H. S., Kim, S. C., Arimoto, N., Yamada, Y., Tamura, N., Onodera, M.,
2012, ApJ, 759, 116
34. **Evidence for a wide range of UV obscuration in $z \sim 2$ dusty galaxies from the GOODS-Herschel survey,**
Penner, K., Dickinson, M., Pope, A., Dey, A., GOODS-Herschel team (Hwang, H. S.),
2012, ApJ, 759, 28
33. **GOODS-Herschel: Ultra-deep XMM-Newton observations reveal AGN/star-formation connection,**
Rovilos, E., Comastri, A., Gilli, R., Georgantopoulos, I., GOODS-Herschel team (Hwang, H. S.),
2012, A&A, 546, 58
32. **The spin of late-type galaxies at high redshift,**
Cervantes-Sodi, B., Hernandez, X., Hwang, H. S., Park, C., Le Borgne, D.,
2012, MNRAS, 426, 1606
31. **SUBARU Spectroscopy of the Globular Clusters in the Virgo Giant Elliptical Galaxy M86,**
Park, H. S., Lee, M. G., Hwang, H. S.,
2012, ApJ, 757, 184
30. **GOODS-Herschel & CANDELS: The Morphologies of Ultraluminous Infrared Galaxies at $z \sim 2$,**
Kartaltepe, J., Dickinson, M., GOODS-Herschel team (Hwang, H. S.), CANDELS team,
2012, ApJ, 757, 23
29. **GOODS-Herschel: dust attenuation properties of UV selected high redshift galaxies,**
Buat, V., Noll, S., Burgarella, D., GOODS-Herschel team (Hwang, H. S.),
2012, A&A, 545, 141
28. **The Herschel Multi-tiered Extragalactic Survey: HerMES,**
Oliver, S. J., Bock, J., HerMES team (Hwang, H. S.),
2012, MNRAS, 424, 1614

27. **Do bars trigger activity in galactic nuclei?**
Lee, G. H., Woo, J.-H., Lee, M. G., **Hwang, H. S.**, Lee, J. C., Sohn, J., Lee, J. H.,
2012, ApJ, 750, 141
26. **A Herschel view of the far-infrared properties of submillimetre galaxies,**
Magnelli, B., Lutz, D., Santini, P., Saintonge, A., Berta, S., PEP/HerMES team (**Hwang, H. S.**),
2012, A&A, 539, 155
25. **AKARI Observation of the NEP Supercluster at $z=0.087$: mid-infrared view of transition galaxies,**
Ko, J., Im, M., Lee, H. M., Lee, M. G., Kim, S. J., Shim, H., Jeon, Y., **Hwang, H. S.**, et al.,
2012, ApJ, 745, 181
24. **The evolution of the star formation activity per halo mass up to redshift ~ 1.6 as seen by Herschel,**
Popesso, P., Biviano, A., PEP team, GOODS-Herschel team (**Hwang, H. S.**),
2012, A&A, 537, 58
23. **GOODS-Herschel: The far-infrared view of star formation in AGN host galaxies since $z \sim 3$,**
Mullaney, J. R., Pannella, M., Daddi, E., Alexander, D. M., GOODS-Herschel team (**Hwang, H. S.**),
2012, MNRAS, 419, 95
22. **GOODS-Herschel Measurements of the Dust Attenuation of Typical Star-Forming Galaxies at High Redshift: Observations of Ultraviolet-selected Galaxies at $z \sim 2$,**
Reddy, N., Dickinson, M., Elbaz, D., Morrison, G., Giavalisco, M., GOODS-Herschel team (**Hwang, H. S.**),
2012, ApJ, 744, 154
21. **GOODS-Herschel: Gas-to-dust mass ratios and CO-to-H₂ conversion factors in normal and starbursting galaxies at high- z ,**
Magdis, G. E., Daddi, E., Elbaz, D., Sargent, M., GOODS-Herschel team (**Hwang, H. S.**),
2011, ApJ, 740, L15
20. **GOODS-Herschel: A population of 24 μm dropout sources at $z < 2$,**
Magdis, G. E., Elbaz, D., Dickinson, M., **Hwang, H. S.**, GOODS-Herschel team,
2011, A&A, 534, 15
19. **GOODS-Herschel: an infrared main sequence for star-forming galaxies,**
Elbaz, D., Dickinson, M., **Hwang, H. S.**, Diaz-Santos, T., Magdis, G., GOODS-Herschel team,
2011, A&A, 533, 119
18. **GOODS-Herschel: evidence for a UV bump in galaxies at $z > 1$,**
Buat, V., Giovannoli, E., Heinis, S., GOODS-Herschel team (**Hwang, H. S.**),
2011, A&A, 533, 93
17. **Quantifying Galactic Morphological Transformations in the Cluster Environment,**
Cervantes-Sodi, B., Park, C., Hernandez, X., **Hwang, H. S.**,
2011, MNRAS, 414, 587
16. **HerMES: LBGs individually detected at $0.7 < z < 2.0$ in GOODS-N with Herschel/SPIRE,**
Burgarella, D., Heinis, S., Magdis, G., HerMES team (**Hwang, H. S.**),
2011, ApJ, 734, L12
15. **Merging Galaxy Cluster Abell 2255 in Mid-Infrared,**
Shim, H., Im, M., Lee, H. M., Lee, M. G., Kim, S. J., **Hwang, H. S.**, et al.,
2010, ApJ, 727, 14
14. **Evidence for a Tdust-unbiased selection of $z \sim 2$ ULIRGs,**
Magdis, G. E., Elbaz, D., **Hwang, H. S.**, HerMES team,
2010, MNRAS, 409, 22
13. **A First Glimpse into the FIR properties of high- z UV-selected Galaxies; Herschel/PACS observations of $z \sim 3$ LBGs,**
Magdis, G. E., Elbaz, D., **Hwang, H. S.**, Daddi, E., Rigopoulou, D., PEP team,
2010, ApJ, 720, L185
12. **Unveiling Far-Infrared Counterparts of Bright Submillimeter Galaxies Using PACS Imaging,**
Dannerbauer, H., Daddi, E., Morrison, G. E., PEP team (**Hwang, H. S.**),
2010, ApJ, 720, L144
11. **Distribution of Satellite Galaxies in High Redshift Groups,**
Wang, Y., Park, C., **Hwang, H. S.**, Xuelei, C.,
2010, ApJ, 718, 762

10. **A Multi-wavelength View of the Star Formation Activity at $z \sim 3$,**
Magdis, G.E., Elbaz, D., Daddi, E., Morrison, G.E., Dickinson, M., Rigopoulou, D., Gobat, R., **Hwang, H.S.**,
2010, ApJ, 714, 1740
9. **Detection of a Large-Scale Structure of Intracluster Globular Clusters in the Virgo Cluster,**
Lee, M. G., Park, H. S., **Hwang, H. S.**,
2010, Sci⁸, 328, 334
8. **The GC System of the Virgo gE Galaxy NGC 4636: II. Kinematics of the Globular Cluster System,**
Lee, M. G., Park, H. S., **Hwang, H. S.**, Arimoto, N., Tamura, N., Onodera, M.,
2010, ApJ, 709, 1083
7. **The GC System of the Virgo gE Galaxy NGC 4636: I. Subaru/FOCAS Spectroscopy and Database,**
Park, H. S., Lee, M. G., **Hwang, H. S.**, Arimoto, N., Tamura, N., Onodera, M.,
2010, ApJ, 709, 377
6. **The MIR View of Red Sequence Galaxies in Abell 2218 with AKARI,**
Ko, J., Im, M., Lee, H. M., Lee, M. G., Hopwood, R. H., Serjeant, S., Smail, I., **Hwang, H. S.**, et al.,
2009, ApJ, 695, L198
5. **Washington CCD Photometry of the GC System of the Giant Elliptical Galaxy M60 in Virgo,**
Lee, M. G., Park, H. S., Kim, E., **Hwang, H. S.**, Kim, S. C., Geisler, D.,
2008, ApJ, 682, 135
4. **Detection of CFIRB with AKARI/FIS Deep Observations,**
Jeong, W.-S., Pearson, C. P., Lee, H. M., et al. (**Hwang, H. S.**),
2007, Adv. Space Res.⁹, 40, 600
3. **Wide-Field Survey of Globular Clusters in M31. I. A Catalog of New Clusters,**
Kim, S. C., Lee, M. G., Geisler, D., Sarajedini, A., Park, H. S., **Hwang, H. S.**, Harris, W. E., et al.,
2007, AJ¹⁰, 134, 706
2. **The Connection b/n Star-forming Galaxies, AGN host galaxies, and Early-Type Galaxies in the SDSS,**
Lee, J. H., Lee, M. G., Kim, T., **Hwang, H. S.**, Park, C., Choi, Y.-Y.,
2007, ApJ, 663, L69
1. **The Nature of Blue Early-Type Galaxies in the GOODS Fields,**
Lee, J. H., Lee, M. G., **Hwang, H. S.**,
2006, ApJ¹¹, 650, 148

⁸Sci: Science

⁹Adv. Space Res.: Advances in Space Research

¹⁰AJ: The Astronomical Journal

¹¹ApJ: The Astrophysical Journal