

Ho Seong Hwang

Curriculum Vitae

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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

- 2021/03 – Present:** Associate Professor, Seoul National University, Korea
- 2024/07 – Present:** Visiting Associate Professor, Macquarie University, Australia
- 2021/04 – Present:** Visiting Scientist, Korea Astronomy and Space Science Institute (KASI), Korea
- 2019/04 – Present:** Associate Member, Korea Institute for Advanced Study (KIAS), Korea
- 2018/12 – 2021/02:** Staff Scientist, KASI, Korea
- 2014/09 – 2018/12:** Research Professor, 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. Awards

- Sep. 2023 : 2023 SNU College of Natural Science Excellent Lecture Award
- Dec. 2020 : Elected Member of Young Korean Academy of Science and Technology (Y-KAST)
- Oct. 2019 : Outstanding Young Astronomer Award (Korean Astronomical Society)
- Nov. 2016 : One of 30 promising young Korean scientists (by POSTECH)
- Aug. 2007 : Seoul National University Graduate Student Research Award

4. 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

5. References

Prof. Margaret Geller	Smithsonian Astrophysical Observatory, USA	mgeller@cfa.harvard.edu
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
Prof. David Elbaz	CEA Saclay, France	delbaz@cea.fr
Prof. Daniel Fabricant	Smithsonian Astrophysical Observatory, USA	dfabricant@cfa.harvard.edu

Current Graduate Students

- Dongkok Kim (Ph.D., 2021.03 -)
- Sang Hyeon Han (Master/Phd, 2022.03 -)
- Hyeonguk Bahk (Master/Phd, 2021.09 -)
- Yigon Kim (Phd.D., 2024.03 -)
- Gain Lee (Ph.D., 2021.09 -)
- Sang Hyeok Im (Master/Phd, 2021.03 -)
- Daeun Jeong (Master/Phd, 2021.09 -)
- Minsung Kwon (Master/Phd, 2023.03 -)

Current Undergraduate Interns

- Woosuk Kang (SNU, 2021.12 -)
- Jiwon Jang (SNU, 2022.12 -)
- Soojin Kim (SNU, 2022.09 -)
- Hyunjun Na (SNU, 2023.09 -)

Former Undergraduate Interns

- Avery Abramson (UT Austin, 2024.06 - 07)
- Hanbee Seo (Univ. of St Andrews, 2023.06 - 08)
- Taewan Kim (SNU, 2021.07 - 2023.02)
- Yonguk Cho (Kyung Hee Univ., 2024.03 - 06)
- Byungmoo Lim (Postech, 2023.06 - 08)
- Jae Won Lee (PNU, 2022.03 - 08)

6. Students under Supervision

7. Professional Service

• Paper Review:

Astrophysical Journal (ApJ), Astrophysical Journal Letters (ApJL),
Monthly Notices of the Royal Astronomical Society (MNRAS), Astronomy & Astrophysics (A&A),
Publications of the Astronomical Society of Japan (PASJ), Journal of the Korean Astronomical Society (JKAS),
Research in Astronomy and Astrophysics (RAA), Astrophysics and Space Science (ASS)

• Proposal Review:

K-GMT Science Program (Gemini/MMT), Canada-France-Hawaii Telescope (CFHT) for Taiwan's TAC,
East Asian VLBI Network (EAVN)/KaVA(KVN and VERA Array), KVN (Korean VLBI Network)

• Workshop and Conference:

LOC for KIAS Workshop on Cosmology and Structure Formation (2008, 2016, 2018),
Organizer for Survey Science Group Workshop (2015–2018),
SOC for East Asia ALMA Science Workshop (2020), Galaxy Evolution Workshop (2020, 2021, 2022)

• Committees:

Strategic Science Plan Working Group Member for Gemini Telescope (2024 -),
Science Advisory Committee for GMACS (the Giant Magellan Telescope Multi-object Astronomical and Cosmological Spectrograph) for the Giant Magellan Telescope (2022 -),
K-GMT Science and Instrument Working Group (2019 -)

• Activities in Academic Societies:

Board and Scientific Committee member of the Korean Astronomical Society (KAS, 2020–2023),
Member of the 31st International Astronomical Union General Assembly (IAUGA 2022) Committee,
Secretary of the Committee for the Korean Encyclopedia of Astronomy (with KAS/Naver, 2020) Steering Committee
member for the Nomination of the Astronomical Registry in Joseon Dynasty as UNESCO World Heritage (2022-)
Secretary of the Project in KIAS, "Science with Citizens" (2022 -)

• Activities in University:

Vice President of SNU Center for Sports Promotion (2022-2024)

8. Talks in the last 3 years

8.1. Conferences / Colloquia / Lectures

2024/01/29 (Inv.) "Current Status of K-SPEC for A-SPEC",

High 1 Resort, Korea (The 12th Survey Science Group Workshop)

2023/01/25 (Inv.) "Studying Galaxy Clusters with SPHEREx plus 7DT",

Forest Resom Resort, Korea (2024 SPHEREx-7DT Joint Workshop)

2023/12/18 (Inv.) "Studying Extragalactic Astronomy and Cosmology",

The Weekandresort @ Incheon, Korea (The 1st Workshop for the Panchromatic View of Galaxy Formation and Evolution from Star Clusters to Galaxy Clusters)

2023/12/08 "Seongbyeoncheukhudanja: Orbit Calculation of Comets",

Hwasung Rollinghills, Korea (The 2nd Workshop of UNESCO registration Promotion Committee for Seongbyeoncheukhudanja)

- 2023/11/13** “*VR-based Platform for Astronomy Education*”,
Seoul National University, Korea (2023-1 Workshop for VR-based Education)
- 2023/09/15** “*A Spectroscopic Survey for the Nearby Universe with KMTNet: A-SPEC + K-SPEC*”,
KASI, Korea (2023 KMTNet Workshop)
- 2023/07/28 (Inv.)** “*Extragalactic Astronomy and Cosmology*”,
Seoul National University, Korea (2023 Korea Astronomy Olympiad Summer Camp)
- 2023/07/18-24 (Inv.)** “*JWST and Beyond*”,
KIAS, Korea (Pyeong-Chang Summer Institute Lecture)
- 2023/06/30 (Inv.)** “*Dark (Matter) Galaxies: Simulations and Observations*”,
Vivaldi Park in Hong Chun, Korea (Cosmology workshop on the crossroad of astrophysics and particle physics)
- 2023/05/12 (Inv.)** “*Development of Multi-Object Spectrographs for Galaxy Redshift Surveys*”,
Yonsei University, Korea (Astronomy Colloquium Talk)
- 2023/05/10 (Inv.)** “*How to do Space Exploration?*”,
Seoul National University, Korea (School of Earth and Environmental Sciences Luncheon Seminar)
- 2023/02/06 (Inv.)** “*How to do Space Exploration?*”,
The Korean Academy of Science and Technology, Korea (Y-KAST Reports Seminar)
- 2023/02/01 (Inv.)** “*Studying Galaxy Clusters with SPHEREx*”,
Hotel Jeju Bridge Seogwipo, Korea (2023 SPHEREx BRL Workshop)
- 2023/01/13 (Inv.)** “*Extragalactic Astronomy and Cosmology*”,
National Youth Space Center, Korea (2023 Korea Astronomy Olympiad Winter Camp)
- 2022/11/09 (Inv.)** “*Mapping the Universe for the Study of Cosmology and Structure Formation*”,
Department of Physics @ SNU, Korea (Physics Colloquium Talk)
- 2022/10/24 (Inv.)** “*A-SPEC: The All-sky SPECTroscopic survey of nearby galaxies*”, KIAS, Korea (The 10th KIAS Workshop on Cosmology and Structure Formation)
- 2022/07/14 (Inv.)** “*Development of Multi-object Spectrograph for Galaxy Redshift Surveys*”,
KIAS, Korea (KIAS Summer School 2022 Extragalactic Astronomy and Cosmology)
- 2022/07/12 (Inv.)** “*Data and Science cases with A-Spec*”,
Seoul, Korea (Focus Workshop 5: Synergy between gravitational-wave observations and redshift surveys)
- 2022/02/21 (Inv.)** “*My work as a member of Center for Large Telescopes*”,
Yeosu, Korea (A 2022 Group Workshop of KASI Center for Large Telescopes)
- 2022/02/14 (Inv.)** “*[A-SPEC] Focal Plane Hardware, Metrology System and Fiber Assignment Algorithm*”,
High 1 Resort, Korea (The 10th Survey Science Group Workshop)
- 2022/01/11** “*Galaxy Clusters with the SPHEREX All-Sky Spectral Survey*”,
Resom Forest Resort, Korea (2022 SPHEREx Legacy Science Workshop)

8.2. Public Talks

- 60) 2024/06/22** “*Understanding Dark Universe with Light: Dark Dark Energy*”, Gwacheon National Science Museum, Korea (Expert Talk Series)
- 59) 2024/06/11** “*Cosmic Address and the Future of Astronomy/Space Science*”,
Kunsan High School, Korea (KAST Special Lecture)
- 58) 2024/05/11** “*What is Cosmic Address?*”,
Cafe QUA, Korea (Astronomy Lecture Series for Kids)
- 57) 2024/04/29** “*Cosmic Address and the Future of Astronomy/Space Science*”,
Dongduk Girl’s High School, Korea
- 56) 2024/04/27** “*Understanding our Universe with Cosmic Address*”, Seoul National University, Korea (Saturday Lecture Series of SNU College of Natural Sciences)
- 55) 2024/03/26** “*What Modern Astronomy Tells us about the Universe and Humans*”, Seoul National University, Korea (SNU AFP Advanced Program)

- 54) **2024/03/22** “*Modern Cosmology: Understanding Dark Matter and Dark Energy using the Map of the Universe*”, Yonsei University, Korea (SNU-Yonsei Astro Exchange Event)
- 53) **2023/11/23** “*Understanding Dark Universe with Light: Dark Matter and Dark Energy*”, Gwacheon National Science Museum, Korea (Expert Talk Series)
- 52) **2023/11/17** “*How to Enjoy Our Night Sky*”, Seoul National University, Korea (SNU Observatory Public Night with Fuji Film)
- 51) **2023/11/11** “*Understanding our Universe with Cosmic Address*”, Seoul National University, Korea (Saturday Lecture Series of SNU College of Natural Sciences)
- 50) **2023/11/02** “*Prospects for Korean Space Telescopes*”, KAST, Korea (The 3rd Korea Science Journalists Association - YKAST Forum)
- 49) **2023/10/28** “*Understanding our Universe with Cosmic Address*”, Jeju National University, Korea (2023 High School Conference)
- 48) **2023/10/13-15** “*Mun Gok Sung, I and Universe*”, SNU Observatory, Korea (2023 Gwanak-gu Gang Gam-chan Festival)
- 47) **2023/10/10-24** “*Voyages through the universe*”, SNU Pyeongchang Campus, Korea (2023 Extension College of Seoul National University)
- 46) **2023/07/26** “*Understanding our Universe with the Map of Galaxies*”, Seoul National University, Korea (SNU Natural Science Experience Camp)
- 45) **2023/06/16** “*Cosmic Address and the Future of Astronomy/Space Science*”, Jeil High School, Korea (KAST Special Lecture)
- 44) **2023/04/29** “*Understanding our Universe with Cosmic Address*”, Seoul National University, Korea (Saturday Lecture Series of SNU College of Natural Sciences)
- 43) **2023/04/27** “*Man and the Universe*”, Salon Unfamiliar, Korea (Korean Culture Planning School Seminar)
- 42) **2023/04/22** “*Mapping the Universe with Dark Energy Spectroscopic Instrument (DESI)*”, Gwacheon National Science Museum, Korea (Universe Academy Talk Series)
- 41) **2022/12/17** “*Map of Our Universe: Balance between Dark Matter and Dark Energy*”, Gwacheon National Science Museum, Korea (Universe Academy Talk Series)
- 40) **2022/10/26** “*Cosmic Address and the Future of Astronomy/Space Science*”, Jeolla High School, Korea
- 39) **2022/10/13** “*Voyages through the Universe*”, Gwanak Library, Korea (2022 Reading Academy)
- 38) **2022/09/30** “*The Sky Tonight*”, Gumdan Elementary School, Korea
- 37) **2022/08/06** “*Modern Cosmology: Understanding Dark Matter and Dark Energy with Large-scale Structures in the Universe*”, Busan National Science Museum, Korea (IAUGA Special Lecture on Astronomy)
- 36) **2022/07/18** “*Cosmic Address and the Future of Astronomy/Space Science*”, Iri High School, Korea (KAST Special Lecture)
- 35) **2022/07/15** “*How to make the Galaxy where we live in*”, Jeongdok Public Library, Korea (Science Touch by National Research Foundation)

9. List of Publication

- 208 refereed papers in total:
5 submitted, 18 as first author, 36 as second author, and 149 as co-author (including 24 corresponding author)

9.1. Refereed Publications, Submitted

5. **Diverse Rotation Curves of Galaxies in a Simulated Universe: the Observed Dependence on Stellar Mass and Morphology Reproduced**,
Jeong, D., **Hwang, H. S.**, Chung, H., Yoon, Y.,
2024, ApJ, submitted
4. **Inferring Cosmological Parameters on SDSS via Domain-Generalized Neural Networks and Lightcone Simulations**,
Lee, J.-Y., et al. (**Hwang, H. S.**),
2024, ApJ, submitted

3. **Direct Evidence of a Major Merger in the Perseus Cluster**,
HyeongHan, K., et al. (**Hwang, H. S.**),
2024, NatAs, submitted (arXiv:2405.00115)
2. **ODIN: Improved Narrowband Ly α Emitter Selection Techniques for $z=2.4$, 3.1, and 4.5**,
Firestone, N. M., et al. (**Hwang, H. S.**),
2024, ApJ, submitted (arXiv:2312.16075)
1. **Machine-learning based Photometric Redshifts for the Galaxies in the North Ecliptic Pole Wide field: catalogs of spectroscopic and photometric redshifts**,
Kim, T., **Hwang, H. S.**, et al.,
2023, ApJS, submitted

9.2. *Refereed Publications, First Author*

18. **Evolution of star formation rate-density relation over cosmic time in a simulated universe: the observed reversal reproduced**,
Hwang, H. S., Shin, J., Song, H.,
2019, MNRAS, 489, 339
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 μ m-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

9.3. *Refereed Publications, Second Author*

36. **Testing Lyman Alpha Emitters and Lyman-Break Galaxies as Tracers of Large-Scale Structures at High Redshifts**,
Im, S., Hwang, H. S., et al.,
2024, ApJ, in press (arXiv:????????)
35. **A Deep Redshift Survey of the Perseus Cluster: Spatial Distribution and Kinematics of Galaxies**,
Kang, W., Hwang, H. S., et al.,
2024, ApJS, 272, 22
34. **UPCluster-SZ: The Updated Catalog of Galaxy Clusters from the List of Planck Sunyaev-Zeldovich Sources**,
Bahk, H., Hwang, H. S.,
2024, ApJS, in press (arXiv:2403.03818)
33. **Understanding the Formation and Evolution of Dark Galaxies in a Simulated Universe**,
Lee, G., Hwang, H. S., et al.,
2024, ApJ, 962, 129
32. **BCG alignment with the Locations of Cluster Members and the Large Scale Structure out to 10 R_{200}** ,
Smith, R., Hwang, H. S., et al.,
2023, MNRAS, 525, 4685
31. **The Origin of Star Formation in Early-type Galaxies Inferred from Spatially Resolved Spectroscopy**,
Lee, Y.H., Hwang, H. S., et al.,
2023, ApJ, 953, 88
30. **Metallicity-PAH Relation of MIR-selected Star-forming Galaxies in AKARI North Ecliptic Pole-wide Survey**,
Shim, H., Hwang, H. S., et al.,
2023, AJ, 165, 31
29. **The Evolution of Merger Fraction of Galaxies $z < 0.6$ depending on the Star Formation Mode in the AKARI NEP-Wide field**,
Kim, E., Hwang, H. S., et al.,
2021, MNRAS, 507, 3113
28. **Searching for Mg II Absorbers in and around Galaxy Clusters**,
Lee, J. C., Hwang, H. S., Song, H.,
2021, MNRAS, 503, 4309
27. **Star Formation Activity of Galaxies Undergoing Ram Pressure Stripping in the Virgo Cluster**,
Mun, J. Y., Hwang, H. S., Lee, M. G., Chung, A., Yoon, H., Lee, J. C.,
2021, JKAS, 54, 17

¹MNRAS: Monthly Notices of the Royal Astronomical Society

26. **A Redshift Survey of the Nearby Galaxy Cluster Abell 2107: Global Rotation of the Cluster and its Connection to Large-scale Structures in the Universe**,
Song, H., **Hwang, H. S.**, Park, C., Smith, R., Einasto, M.,
2018, ApJ, 869, 124
25. **A Study of Environmental Effects on Galaxy Spin using MaNGA data**,
Lee, J. C., **Hwang, H. S.**, Chung, H.,
2018, MNRAS, 477, 1567
24. **Demise of Faint Satellites around Isolated Early-type Galaxies**,
Park, C., **Hwang, H. S.**, Park, H., Lee, J. C.,
2018, NatAs², 2, 162
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
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, 7pen83, 52

²NatAs: Nature Astronomy

³JKAS: Journal of Korean Astronomical Society

⁴AN: Astronomische Nachrichten

⁵ApJS: The Astrophysical Journal Supplement Series

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
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

9.4. *Refereed Publications, Co-Author*

149. **Chandra Survey in the AKARI North Ecliptic Pole Deep Field Optical/Infrared Identifications of X-ray Sources**,
Miyaji, T., et al. (**Hwang, H. S.**),
2024, A&A, in press (arXiv:2407.13864)
148. **SCUBA-2 Ultra Deep Imaging EAO Survey (STUDIES). V. Confusion-limited Submillimeter Galaxy Number Counts at 450 μ m and Data Release for the COSMOS Field**,
Gao, Z.-K., et al. (**Hwang, H. S.**),
2024, ApJ, in press (arXiv:2405.20616)
147. **Morphology of Galaxies in JWST Fields: Initial distribution and Evolution of Galaxy Morphology**,
Lee, J. H., Park, C., **Hwang, H. S.**, Kwon, M.,
2024, ApJ, 966, 113
146. **Effects of galaxy environment on merger fraction**,
Pearson, W. J., et al. (**Hwang, H. S.**),
2024, A&A, 686, 94
145. **A large population of strongly lensed faint submillimetre galaxies in future dark energy surveys inferred from JWST imaging**,
Pearson, J., et al. (**Hwang, H. S.**),
2024, MNRAS, 527, 12044

⁶A&A: Astronomy & Astrophysics

144. **The One-hundred-deg² DECam Imaging in Narrowbands (ODIN): Survey Design and Science Goals**,
Lee, K.-S., et al. (Hwang, H. S.),
2024, ApJ, 962, 36
143. **New method to revisit the gravitational lensing analysis of the Bullet Cluster using radio waves**,
Yoon, Y., Park J.-C., Hwang, H. S.,
2023, JCAP, 09, 044
142. **Tomographic Alcock-Paczynski Test with Redshift-Space Correlation Function: Evidence for the Dark Energy Equation of State Parameter w_0-1** ,
Dong, F., et al. (Hwang, H. S.),
2023, ApJ, 953, 98
141. **ODIN: Where Do Lyman-alpha Blobs Live? Contextualizing Blob Environments within the Large-Scale Structure**,
Ramakrishnan, V., et al. (Hwang, H. S.),
2023, ApJ, 951, 119
140. **The SCUBA-2 Large eXtragalactic Survey: 850 μ m map, catalogue and the bright-end number counts of the XMM-LSS field**,
Garratt, T., et al. (Hwang, H. S.),
2023, MNRAS, 520, 3669
139. **HectoMAP: The Complete Redshift Survey (Data Release 2)**,
Sohn, J., Geller, M., Hwang, H. S., et al.
2023, ApJ, 945, 94
138. **The DESI Survey Validation: Results from Visual Inspection of Bright Galaxies, Luminous Red Galaxies, and Emission Line Galaxies**,
Lan, T.-W. et al. (Hwang, H. S.),
2023, ApJ, 943, 68
137. **Understanding Galaxy Rotation Curves with Verlinde's Emergent Gravity**,
Yoon, Y., Park J.-C., Hwang, H. S.,
2023, Classical and Quantum Gravity, 40bLT01Y
136. **The cold gas and dust properties of red star-forming galaxies**,
Chown, R., et al. (Hwang, H. S.),
2022, MNRAS, 516, 84
135. **Spatial distribution of dark matter in and around galaxy clusters traced by galaxies, gas and intracluster stars in a simulated universe**,
Shin, J., Lee J. C., Hwang, H. S., et al.,
2022, ApJ, 261, 28
134. **Comparison of spatial distributions of Intracluster light and Dark Matter**,
Yoo, J., et al. (Hwang, H. S.),
2022, ApJS, 261, 28
133. **The Next Generation Virgo Cluster Survey. XXXIII. Stellar Population Gradients in the Virgo Cluster Core Globular Cluster System**,
Ko, Y., et al. (Hwang, H. S.),
2022, ApJ, 931, 120
132. **Multi-wavelength properties of the North Ecliptic Pole SCUBA-2 survey 850-micron selected galaxies**,
Shim, H., et al. (Hwang, H. S.),
2022, MNRAS, 514, 2915
131. **Minkowski Functionals of SDSS-III BOSS : Cosmological Parameter Estimation**,
Appleby, S., et al. (Hwang, H. S.),
2022, ApJ, 928, 108
130. **Determining star formation rates of active galactic nuclei host galaxies based on SED fitting with sub-mm data**,
Kim, C., Jadhav, Y., Woo, J. et al. (Hwang, H. S.),
2022, ApJ, 928, 73
129. **North Ecliptic Pole merging galaxy catalogue**,
Pearson, W. J., et al. (Hwang, H. S.),
2022, A&A, 661, 52

128. **Is Abell 2261 a fossil galaxy cluster in a transitional dynamical state?**,
Kim, H., Ko, J. et al. (Hwang, H. S.),
2022, ApJ, 928, 170
127. **The Seventeenth Data Release of the Sloan Digital Sky Surveys: Complete Release of MaNGA, MaStar and APOGEE-2 Data**,
SDSS Collaboration (Hwang, H. S.),
2022, ApJS, 259, 35
126. **Properties of Fast and Slow Bars Classified by Epicyclic Frequency Curves from Photometry of Barred Galaxies**,
Lee, Y. H., Park, M.-G., Hwang, H. S., et al.,
2022, ApJ, 926, 58
125. **The HectoMAP Cluster Survey: Spectroscopically Identified Clusters and their Brightest Cluster Galaxies (BCGs)**,
Sohn, J., Geller, M., Hwang, H. S., et al.,
2021, ApJ, 923, 143
124. **Environmental Effects on AGN activity via Extinction-free Mid-Infrared Census**,
Santos, D., et al. (Hwang, H. S.),
2021, MNRAS, 507, 3070
123. **Optically-detected galaxy cluster candidates in the AKARI North Ecliptic Pole field based on photometric redshift from Subaru Hyper Suprime-Cam**,
Huang, T.-C., et al. (Hwang, H. S.),
2021, MNRAS, 506, 6063
122. **Active galactic nuclei catalog from the AKARI NEP Wide field**,
Poliszczuk, A. , et al.(Hwang, H. S.),
2021, A&A, 641, 108
121. **Revealing the Local Dark-Matter Map by Deep Learning**,
Hong, S. E., Jeong D., Hwang, H. S., Kim, J.,
2021, ApJ, 913, 76
120. **Revisiting the Color-Color Selection: Submillimeter and AGN Properties of NUV-r-J Selected Quiescent Galaxies**,
Hwang, Y.-H., et al.(Hwang, H. S.),
2021, ApJ, 913, 6
119. **The HectoMAP Redshift Survey: First Data Release**,
Sohn, J., Geller, M., Hwang, H. S., et al.,
2021, ApJ, 909, 129
118. **Cosmological Parameter Estimation from the Two-Dimensional Genus Topology - Measuring the Expansion History using the Genus Amplitude as a Standard Ruler**,
Appleby, S., Park, C., Hong, S., Hwang, H. S., et al.,
2021, ApJ, 907, 75
117. **Beyond halo mass: the role of vorticity-rich filaments in quenching galaxy mass assembly**,
Song, H., Laigle, C., Hwang, H. S., et al.,
2021, MNRAS, 501, 4635
116. **The SAMI Galaxy Survey: Kinematics of Stars and Gas in Brightest Group Galaxies; the Role of Group Dynamics**,
Raouf, M., et al. (Hwang, H. S.),
2021, ApJ, 908, 123
115. **An Active Galactic Nucleus Recognition Model based on Deep Neural Network**,
Chen, B. H. et al. (Hwang, H. S.),
2021, MNRAS, 501, 3951
114. **Identification of Cosmic Voids as Massive Cluster Counterparts**,
Shim, J., Park, C., Kim, J., Hwang, H. S.,
2021, ApJ, 908, 211
113. **Photometric Redshifts of North Ecliptic Pole Wide Fieldbased on Deep Optical Survey using Hyper Suprime-Cam**,

- Ho, C.-C., et al. (Hwang, H. S.),
2021, MNRAS, 502, 140
112. **Identification of AKARI infrared sources by Deep HSC Optical Survey: Construction of New Band-Merged Catalogue on the NEP-Wide field**,
Kim, S. J., et al. (Hwang, H. S.),
2021, MNRAS, 500, 4078
111. **Tracing the evolution of dust-obscured activity using sub-millimetre galaxy populations from STUDIES and AS2UDS**,
Dudzeviciute, K., et al. (Hwang, H. S.),
2021, MNRAS, 500, 942
110. **Extinction-free Census of AGNs in the AKARI/IRC North Ecliptic Pole Field from 23-band Infrared Photometry from space telescopes**,
Wang, T.-W. et al. (Hwang, H. S.),
2020, MNRAS, 409, 4068
109. **The Velocity Dispersion Function for Quiescent Galaxies in Nine Strong-Lensing Clusters**,
Sohn, J. Fabricant, D., Geller, M. J., Hwang, H. S., Diaferio, A.,
2020, ApJ, 902, 17
108. **Ly α Radiative Transfer: Modeling Spectrum and Surface Brightness Profile of Ly α -emitting galaxies at $z = 3 - 6$** ,
Song, H., Seong, K.-I., Hwang, H. S.,
2019, ApJ, 901, 41
107. **NEPSC2, the North Ecliptic Pole SCUBA-2 survey: 850- μ m map and catalogue of 850- μ m selected sources over 2 deg²**,
Shim, H., et al. (Hwang, H. S.),
2020, MNRAS, 498, 5065
106. **CFHT MegaPrime/MegaCam u -band source catalogue of the AKARI North Ecliptic Pole Wide field**,
Huang, K., et al. (Hwang, H. S.),
2020, MNRAS, 498, 609
105. **Infrared Galaxies without Optical Counterparts of Subaru Hyper Suprime-Cam in the AKARI North Ecliptic Pole Wide Survey Field**,
Toba, Y. et al. (Hwang, H. S.),
2020, ApJ, 899, 35
104. **Cosmological Parameter Estimation from the Two-Dimensional GENUS Topology - Measuring the Shape of the Matter Power Spectrum**,
Appleby, S., Park, C., Hong, S., Hwang, H. S., Kim, J.,
2020, ApJ, 896, 145
103. **Cosmological Information from the Small-scale Redshift Space Distortions**,
Tonegawa, M., et al. (Hwang, H. S.),
2020, ApJ, 897, 17
102. **JINGLE: IV. Dust, HI gas and metal scaling laws in the local Universe**,
De Looze, I., et al. (Hwang, H. S.),
2020, MNRAS, 496, 3668
101. **Mapping the working of environmental effects in A963**,
Deshev, B., Haines, C., Hwang, H. S., et al.
2020, A&A, 638, 126
100. **SCUBA-2 Ultra Deep Imaging Eao Survey (STUDIES) IV: Spatial clustering and halo masses of 450 μ m-selected sub-millimeter galaxies**,
Lim, C.-F. et al. (Hwang, H. S.),
2020, ApJ, 895, 104
99. **S2COSMOS: Evolution of Gas Mass with Redshift Using Dust Emission**,
Millard, J. et al. (Hwang, H. S.),
2020, MNRAS, 94, 293
98. **Constraining Cosmology with Big Data Statistics of Cosmological Graphs**,
Hong, S., Jeong, D., Hwang, H. S., et al.,
2020, MNRAS, 493, 5972

97. **SCUBA-2 Ultra Deep Imaging Eao Survey (STUDIES) III: Multi-wavelength properties, luminosity functions and preliminary source catalog of 450- μ m-selected galaxies,**
Lim, C.-F. et al. (Hwang, H. S.),
2020, ApJ, 889, 80
96. **The impact of the connectivity of the cosmic web on the physical properties of galaxies at its nodes,**
Kraljic, K. et al. (Hwang, H. S.),
2020, MNRAS, 491, 42194
95. **Multi-wavelength properties of radio and machine-learning identified counterparts of submillimeter sources from S2COSMOS,,**
An, F. et al. (Hwang, H. S.),
2019, ApJ, 886, 48
94. **The Impact of the Dynamical State of Galaxy Groups on the Stellar Populations of Central Galaxies,**
Raouf, M. et al. (Hwang, H. S.),
2019, ApJ, 887, 264
93. **Estimating the Molecular Gas Mass of Low-redshift Galaxies from a Combination of Mid-infrared Luminosity and Optical Properties,**
Gao, Y. et al. (Hwang, H. S.),
2019, ApJ, 887, 172
92. **JINGLE V: Dust properties of nearby galaxies derived from hierarchical Bayesian SED fitting,**
Lamperti, I. et al. (Hwang, H. S.),
2019, MNRAS, 489, 4389
91. **Sunyaev-Zel'dovich detection of the galaxy cluster Cl J1449+0856 at $z = 1.99$: the pressure profile in uv space,**
Gobat, R., et al. (Hwang, H. S.),
2019, A&A, 629, 104
90. **The East Asian Observatory SCUBA-2 Survey of the COSMOS Field: Unveiling 1147 Bright Submillimeter Sources across 2.6 square degrees,**
Simpson, J. M. et al. (Hwang, H. S.),
2019, ApJ, 880, 43
89. **JINGLE, a JCMT legacy survey of dust and gas for galaxy evolution studies: II. SCUBA-2 850 μ m data reduction and dust flux density catalogues,**
Smith, M. W. L. et al. (Hwang, H. S.),
2019, MNRAS, 486, 4166
88. **The Fifteenth Data Release of the Sloan Digital Sky Surveys: First Release of MaNGA Derived Quantities, Data Visualization Tools and Stellar Library,**
SDSS Collaboration (Hwang, H. S.),
2019, ApJS, 240, 23
87. **Galaxies flowing in the oriented saddle frame of the cosmic web,**
Kraljic, K. et al. (Hwang, H. S.),
2019, MNRAS, 483, 3227
86. **The Effect of Galaxy Interactions on Molecular Gas Properties,**
Pan, H.-A. et al. (Hwang, H. S.),
2018, ApJ, 868, 132
85. **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.),
2018, MNRAS, 481, 3497
84. **Scuba-2 Ultra Deep Imaging EAO Survey (STUDIES) II: Structural Properties and Near-Infrared Morphologies of Faint Submillimeter Galaxies,**
Chang, Y.-Y. et al. (Hwang, H. S.),
2018, ApJ, 865, 103
83. **Wobbling Galaxy Spin Axes in Dense Environments,**
Lee, J., Kim, S., Jeong, H., Smith, R., Choi, H., Hwang, H. S., Joo, S.-J., Kim, H.-S., Lee, Y., Yi, S. K.,
2018, ApJ, 864, 69

82. **Inside a Beehive: the Multiple Merging Processes in the Galaxy Cluster Abell 2142**,
Liu, A., Yu, H., Diaferio, A., Tozzi, P., **Hwang, H. S.**, Umetsu, K., Okabe, N., Yang, L.-L.,
2018, ApJ, 863, 102
81. **Nuclear starburst activity induced by non-axisymmetric bulges in spiral galaxies**,
Kim, E., Kim, S. S., Choi, Y.-Y., Lee, G.-H., de Grijs, R., Lee, M. G., **Hwang, H. S.**,
2018, MNRAS, 479, 562
80. **HeCS-red: Dense Hectospec Surveys of redMaPPer-Selected Clusters**,
Rines, K. J., Geller, M. J., Diaferio, A., **Hwang, H. S.**, Sohn, J.,
2018, ApJ, 682, 172
79. **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.**,
2018, ApJ, 856, 160
78. **The HectoMAP Cluster Survey - I. redMaPPer Clusters**,
Sohn, J., Geller, M. J., Rines, K. J., **Hwang, H. S.**, Utsumi, Y., Diaferio, A.,
2018, ApJ, 856, 172
77. **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.**),
2018, ApJS, 235, 42
76. **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.,
2018, ApJ, 855, 100
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.**,
2018, ApJS, 234, 21
74. **The unexpectedly large dust and gas content of quiescent galaxies at $z > 1.4$** ,
Gobat, R., et al. (**Hwang, H. S.**),
2018, NatAs, 2, 239
73. **COSMOS2015 photometric redshifts probe the impact of filaments on galaxy properties**,
Laigle, C., Pichon, C., et al. (**Hwang, H. S.**),
2018, MNRAS, 474, 5437
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. **Discovery of Nine Intermediate-redshift Compact Quiescent Galaxies in the Sloan Digital Sky Survey**,
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, *ApJL*⁷, 771, 19
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

⁷ApJL: The Astrophysical Journal Letters

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, ApJL, 740, 15
20. **GOODS-Herschel: A population of 24 μ m 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, ApJL, 734, 12
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, ApJL, 720, 185
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, ApJL, 720, 144
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, ApJL, 695, 198
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