Marcie (Jae Yeon) Mun

Research School of Astronomy & Astrophysics Australian National University, Canberra ACT 2611, Australia Last updated: 27th September, 2024 jaeyeon.mun@anu.edu.au ORCID: 0000-0002-3706-9955 Website: https://jymarcie.github.io

Education

Australian National University (ANU)

Canberra, Australia

Ph.D. in Astronomy & Astrophysics

Mar 2021 - Feb 2025

- Thesis: Evolution of the spatially resolved star formation activity of galaxies across cosmic time in observations and simulations
- Primary supervisor: A/Prof. Emily Wisnioski
- Co-supervisors: Dr. Andrew Battisti, Dr. Trevor Mendel, Prof. Sara Ellison

Seoul National University (SNU)

Seoul, Korea

M.S. in Astronomy

Mar 2018 - Aug 2020

- Thesis: Star Formation Activity of Galaxies Undergoing Ram Pressure Stripping in the Virgo Cluster
- Advisors: Prof. Myung Gyoon Lee, Dr. Ho Seong Hwang

University of California, Los Angeles (UCLA)

Los Angeles, CA, USA

B.S. in Astrophysics

Sep 2012 - Jun 2016

Research Appointments

Korea Astronomy and Space Science Institute (KASI)

Daejeon, Korea

Visiting Researcher

Sep 2020 - Feb 2021

- Project title: Role of galaxy-galaxy interactions on the evolution of galaxy properties in IllustrisTNG
- **Host:** Dr. Ho Seong Hwang

Teaching Experience

Seoul National University (SNU)

Seoul, Korea

Graduate Teaching Assistant

Mar 2019 - June 2019 / Mar 2020 - June 2020

- Course: Techniques in Astronomical Observation
- Covered topics ranging from basics of data reduction, aperture and PSF photometry, deep field photometry, to long-slit spectroscopy, along with the basics of IRAF and SExtractor.

Publications

I used to publish under the name of Mun, Jae Yeon, but now publish under either Mun, Marcie or Mun, M. Please refer to this ADS Library for an easily accessible list of all my publications.

First-author publications

- Mun, M., Wisnioski, E., Battisti, A.J., Mendel, J.T., Ellison, S.L., et al. (2024), The MAGPI Survey: evolution of radial trends in star formation activity across cosmic time, MNRAS, 530, 5072
- Mun, J.Y., Hwang, H.S., Lee, M.G., Chung, A., Yoon, H., Lee, J.C. (2021), Star Formation Activity of Galaxies Undergoing Ram Pressure Stripping in the Virgo Cluster, JKAS, 54, 17

Co-author publications

- Park, H.-J., Battisti, A.J., Wisnioski, E., Cortese, L., Seibert, M., 6 authors Mun, M., et al. (2024),
 The spatially resolved relation between dust, gas, and metal abundance with the TYPHOON survey, MNRAS, accepted
- Mai, Y., Croom, S.M., Wisnioski, E., Vaughan, S.P., Varidel, M.R., 2 authors Mun, M., et al. (2024),
 The MAGPI Survey: the evolution and drivers of gas turbulence in intermediate-redshift galaxies, MNRAS, 533, 3878
- Derkenne, C., McDermid, R.M., D'Eugenio, F., Foster, C., Khalid, A., 6 authors Mun, M., et al. (2024),
 The MAGPI Survey: Massive slow rotator population in place by z ~ 0.3, MNRAS, 531, 4602
- Chen, Q.-H., Grasha, K., Battisti, A.J., Wisnioski, E., Mendel, T., 4 authors **Mun, M.**, et al. (2024), The MAGPI Survey: effects of spiral arms on different tracers of the interstellar medium and stellar populations at $z \sim 0.3$, MNRAS, 527, 2991
- Bagge, R.S., Foster, C., Battisti, A., Bellstedt, S., **Mun, M.**, et al. (2023), The MAGPI Survey: Drivers of kinematic asymmetries in the ionised gas of $z \sim 0.3$ star-forming galaxies, PASA, 40, 60
- Lee, J.H., Lee, M.G., Mun, J.Y., Cho, B., Kang, J. (2022)

 A GMOS/IFU Study of Jellyfish Galaxies in Massive Clusters, ApJ, 940, 24
- Lee, J.H., Lee, M.G., Mun, J.Y., Cho, B., Kang, J. (2022), Enhanced Star Formation Activity of Extreme Jellyfish Galaxies in Massive Clusters and the Role of Ram Pressure Stripping, ApJL, 931L, 22

Presentations

Conference talks / Colloquia

- Jun 2024. ASTRO-3D¹ Science Legacy Meeting (Sydney, Australia)
- Sep 2023. Galaxy Transformation Across Space and Time 3rd ESO-Australia Meeting (Canberra, Australia)
- Jul 2023. Astronomical Society of Australia (ASA) Annual Science Meeting (ASM) 2023 (Macquarie University, Sydney, Australia)
- Sep 2022. Epoch of Galaxy Quenching 2022 (Kavli Institute for Cosmology, Cambridge, United Kingdom)
- Aug 2022. IAU Symposium 373: Resolving the Rise and Fall of Star Formation in Galaxies (Busan, Korea)
- Aug 2021. (Invited) Korean Young Astronomers Meeting (K-YAM) Colloquium (Virtual)
- Feb 2021. Galaxy Evolution Workshop 2020 (Academia Sinica Institute of Astronomy and Astrophysics, Taipei, Taiwan; Virtual)

Awards

ANU RSAA Olin J Eggen Research Award (2,500 AUD)	24
ANU RSAA Supplementary Scholarship	24
ANU PhD Scholarship	24
Korean Astronomical Society (KAS) Rising Star Award (500,000 KRW)	21
SNU Merit-Based Scholarship	.9

Services

	024
ASTRO 3D Student Committee Chair	024

¹ASTRO 3D: ARC Centre of Excellence for All Sky Astrophysics in 3 Dimensions

Research Skills

Programming Languages

• Python, IDL, Bash

Software

• IRAF, SEXTRACTOR, GALFIT, LEPHARE, PSFEX, TOPCAT

Data & Simulations

- Instruments: Multi-Unit Spectroscopic Explorer (MUSE)
- Simulations: EAGLE (GADGET3/ANARCHY), MAGNETICUM (GADGET3), ILLUSTRISTNG (AREPO)

Collaborations/Memberships

- MAGPI (Middle Ages Galaxy Properties with Integral Field Spectroscopy)
- ASTRO-3D (ARC Centre of Excellence in All Sky Astrophysics in 3 Dimensions)
- ASA (Astronomical Society of Australia)