

HYEIN YOON

Yonsei University
Department of Astronomy
College of Science
50 Yonsei-ro, Seodaemun-gu
Seoul 03722, Korea

Office: +82 (0)2 2123 7626
Fax: +82 (0)2 392 7680
Email: hyein.yn@gmail.com
Website: <http://hyeinyoon.github.io>
ORCID: 0000-0003-4048-2203

EDUCATION

Yonsei University, Korea

- Ph.D. in Astronomy** Aug 2019 (expected)
- Thesis topic: Pre-processing on the H I gas and stellar properties of galaxies in the large-scale filaments and groups around the Virgo Cluster
- Supervisor: Prof. Aeree Chung (Yonsei)
- M.S. in Astronomy** Feb 2013
- Thesis: Diagnostics to Probe Environmental Effects on Late-type Galaxies in the Virgo Cluster
- Supervisor: Prof. Aeree Chung (Yonsei)
- B.S. in Astronomy** Feb 2011
- Double major: Physics

RESEARCH INTERESTS

Neutral atomic hydrogen (H I) survey — High resolution H I imaging — Radio data processing —
Environmentally driven galaxy evolution — Pre-processing of galaxies in large-scale filaments/groups

RESEARCH EXPERIENCE AND ADVANCED EDUCATION

- Research assistant, Yonsei University** 2011 – 2013 (Master) / 2013 – Present (Ph.D.)
- Supervisor: Aeree Chung (Yonsei)
- Visiting researcher at ICRAR/UWA** 2016 – 2017 (7 months)
- International Centre for Radio Astronomy Research/University of Western Australia, Australia
- Supported by the Australian Government's Endeavour Research Fellowship
- Host: Dr. O. Ivy Wong (ICRAR/UWA)
- NRAO 14th Synthesis Imaging School** 2014
- NRAO and New Mexico Institute of Mining and Technology, USA

GRANTS, AWARDS, AND SCHOLARSHIPS

- Travel Grant** - Korea Center for Woman in Science/Engineer/Technology (WISET), 2018 (~ USD 2,000)
- Award for student Poster Competition** - "Yonsei Astro Poster Jamboree", Yonsei University, 2017
- Endeavour Research Fellowship** - Australian Government, 2016 (~ AUD 23,000)
- BK21 Plus Scholarship** - National Research Foundation of Korea, 2013 – 2016
- BK21 Scholarship** - National Research Foundation of Korea, 2011 – 2012
- Teaching/Research Assistantship** - Yonsei University, 2011 – 2012
- Honors** - Yonsei University, 2010
- Truth Scholarship (University Designated)** - Yonsei University, 2009 – 2010
- Yonsei Internal/External Scholarship** - Yonsei University, 2009

TEACHING EXPERIENCE

- Teaching Assistant at Yonsei University**
- Astrophysics II (Fall 2012), Radio astronomy (Spring 2012), Understanding of Space (Fall/Spring 2011)
- Volunteer teacher**
- Study guidance for middle school students at Chungam community child center, 2007 – 2008

OBSERVING EXPERIENCE AND SUCCESSFUL PROPOSALS

Westerbork Synthesis Radio Telescope, 72-m configuration (96 hours, PI of R14A011)

- H I observations for an imaging study of gas-rich galaxies in North-western filament of Virgo

Karl G. Jansky Very Large Array, D-configuration (7.5 hours, PI of 14A-304)

- H I observation for an imaging study of gas-rich and -poor galaxies in North-eastern filament of Virgo

Giant Metrewave Radio Telescope (20 hours, PI of 25_034)

- H I observation for an imaging study of gas-rich and -poor galaxies in an infalling group to Virgo

Nobeyama 45-m Radio Telescope (40 hours, Co-I of CG121032)

- Measuring $^{12}\text{CO}(1-0)$ gas content of galaxies in Abell 963 at $z=0.2$

Nobeyama 45-m Radio Telescope (40 hours, Assist, CG112025)

- Measuring $^{12}\text{CO}(1-0)$ gas content of galaxies in Abell 963 at $z=0.2$

PRESENTATIONS (SELECTED)

Oral Presentations

KASI workshop - Environmental Effects on Galaxies in Groups and Clusters, KASI, Korea, Sep 2018

2018 Radio Telescope User's Meeting, KASI, Korea, Aug 2018

Galaxies A to Z workshop, Naksan, Korea, June 2018

PHISCC: SKA Pathfinders H I Science Coordination Committee meeting, Pingtang, China, June 2018

Yonsei-Oxford Galaxy Evolution Symposium, Yonsei, Korea, May 2018

From Field to Clusters: H I as a tracer of galaxy evolution, Swinburne University, Australia, Mar 2017

2016 Bolton and Student Symposium, CSIRO, Australia, Nov 2016 (short talk)

ICRAR-CON, Mandurah Seashells Resort, Australia, Sep 2016 (introductory talk)

SKA in Seoul: Asia-Pacific Regional Workshop on H I Science 2015, Seoul, Korea, Nov 2015

International Workshop on Galaxy Clusters and Galaxy Formation, Yonsei, Korea, Oct 2015

Meeting of the Korean Astronomical Society, Gwangju, Korea, Oct 2012

Virgo Collaboration Workshop, Bennington University, USA, Aug 2012

Galaxies Lunch, Columbia University, USA, Aug 2012

1st and 2nd CNU-Yonsei Workshop on Galaxies, CNU, Korea, Nov 2011, Apr 2012

Poster Presentations

KIAA Forum on Star formation, Kavil-Peking University, China, June 2018

The 1st Yonsei Astro Poster Jamboree, Yonsei University, Nov 2017

Meeting of the Korean Astronomical Society, Korea, Apr 2016 (Busan), Apr 2015 (SNU), Oct 2011 (Jeju)

12th Asia-Pacific Regional IAU Meeting, DCC, Korea, Aug 2014

2014 APNN & MAPWiST, Ehwa University, Korea, Aug 2014

SERVICE, OUTREACH, AND MENTORING

WISSET online mentoring for juniors, 2018 – 2019 (6 months)

WISSET & General Electrics global mentoring, 2018 (8 months)

Local organizer of “SKA in Seoul on H I Science” conference, 2016

Volunteering at Africa-Asia Destitute Relief Foundation (ADRF), 2015 (three visits)

Member of Yonsei astronomy club for public outreach (“Byul-a-rum”), 2008 – 2009

Volunteer teacher at Chungam community child center, 2007 – 2008 (18 months)

COMPUTING SKILLS

Languages: Python, Fortran, LaTeX, HTML, IDL (basic), Matlab (basic)

Radio data processing tools: AIPS, CASA, MIRIAD, Karma, GIPSY, SoFiA

Astronomical data tools: IRAF, DisPerSE, Fv

Graphics: Matplotlib, SuperMongo, Adobe Illustrator

MEMBERSHIPS

VIVA (VLA Imaging of Virgo in Atomic gas) survey, BUDHIES (Blind Ultra Deep HI Survey) collaboration

Korean Astronomy Society (KAS), American Astronomy Society (AAS)