

# CURRICULUM VITAE

LAST UPDATE: 28 FEB 2021

## HYEIN YOON

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### CURRENT POSITION

#### The University of Sydney, Australia

**ASTRO-3D Postdoctoral Research Associate**

Sep 2019 – Present

- Project: HI absorption-line survey toward radio continuum sources (ASKAP-FLASH survey team)

### EDUCATION

#### Yonsei University, Korea

**Ph.D. in Astronomy**

Aug 2019

- Thesis: *The Impact of Large-scale Environments on Galaxy Evolution: Insights from the Neutral Hydrogen Gas in Galaxies Inside and Outside of 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 — H I absorption and emission lines — Radio data processing — Data quality assessment — Environmentally-driven galaxy evolution — Pre-processing of galaxies in large-scale filaments/groups

### RESEARCH EXPERIENCE AND ADVANCED EDUCATION

**Postdoctoral researcher, The University of Sydney**

2019 – Present

- Supervisor: Prof. Elaine Sadler (USyd/CSIRO)

**Research assistant, Yonsei University**

2011 – 2013 (Master) / 2013 – 2019 (Ph.D.)

- Supervisor: Prof. 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 Australian Government 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

**Research Travel Grant** - Korea Center for Woman in Science/Engineer/Technology (WISET), 2018

**Award for Student Poster Competition**, “Yonsei Astro Poster Jamboree” - Yonsei University, 2017

**Endeavour Research Fellowship** - Australian Government, 2016

**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

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### **Unit coordinator at the University of Sydney**

- Data Science in Astronomy: Algorithms (OLET1618; Semester 1, Semester 2 2020)

### **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

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**Australia Telescope Compact Array (11.5 hours, PI of CX473 + Duty astronomer)**

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

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

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

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

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

## PRESENTATIONS (SELECTED)

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### **Oral Presentations**

Co-learnium, CSIRO, Australia, Jan 2021 (remote)

236th Meeting of the American Astronomical Society, USA, June 2020 (remote)

SIFA Astro Morning Tea talk, University of Sydney, Australia, July 2020 (remote)

233rd Meeting of the American Astronomical Society (dissertation talk), Seattle, USA, Jan 2019

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)

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

### **Poster Presentations**

Meeting of the Korean Astronomical Society, Korea, Oct 2020 (remote)

KIAA Forum on Star formation, Kavli-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

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**Mentoring for juniors** - Korea Center for Woman in Science/Engineer/Technology (WISET), 2018 – 2019

**Global mentoring for career development** - WISET and General Electrics, 2018 – present

**Local organizer** - LOC for the international conference, “SKA in Seoul on H I Science”, 2016

**Volunteering (translation/editing)** - Africa-Asia Destitute Relief Foundation (ADRF), 2015

**BK21 Plus Assistant (department assistant)** - Yonsei University, 2014

**Public outreach** - Yonsei astronomy public outreach club (“Byul-a-rum”), 2008 – 2009

**Volunteering (teaching)** - Chungam community child center, 2007 – 2008

## COMPUTING SKILLS

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

Astronomical data processing tools: CASA, MIRIAD, AIPS, Karma, GIPSY, SoFiA, IRAF, DisPerSE, Fv

Graphics: Matplotlib, SuperMongo, Adobe Illustrator

## COLLABORATIONS/MEMBERSHIPS

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ASKAP-FLASH (First Large Absorption Survey in H I), VIVA (VLA Imaging of Virgo in Atomic gas),

BUDHIES (Blind Ultra Deep H I Environmental Survey), Korean Astronomy Society (KAS)