

# CURRICULUM VITAE

LAST UPDATE: 25 Nov 2021

## HYEIN YOON

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### CURRENT POSITION

#### ASKAP Survey Science Team, Australia

FLASH Project Scientist (ASKAP-FLASH; First Large Absorption Survey in H I) Oct 2021 – Present

#### The University of Sydney, Australia

ASTRO 3D Postdoctoral Research Associate Sep 2019 – Present

### 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 in large-scale filaments/groups

### RESEARCH EXPERIENCE AND ADVANCED EDUCATION

Project Scientist, ASKAP-FLASH Project 2021 – Present

Postdoctoral researcher, The University of Sydney 2019 – Present

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

- FLASH Pilot Survey Phase 1 data validation, H I absorption line analysis, Radio source imaging

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

- 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)

## 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)**

**Co-I projects: e-MERLIN (CY12212), JVLA (21A-310), MeerKAT (MKT-20135), GMRT (40\_096, 40\_092, 36\_002), ATCA (C3392), NRO 45-m (CG121032, CG112025)**

## PUBLICATIONS

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Link to My ADS Library - <https://ui.adsabs.harvard.edu/public-libraries/5yMcyHDUTbuXMFdYYIep-g>

## PRESENTATIONS (SELECTED, LAST 3 YEARS)

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2021 ASTRO 3D Science Meeting, Australia, Sep 2021 (remote)

2021 Astronomical Society of Australia - Annual Science Meeting, Australia, July 2021 (remote)

SIFA Astro Morning Tea talk, University of Sydney, Australia, June 2021 (remote)

East-Asia SKA workshop, Japan, May 2021 (remote)

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

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

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

KIAA Forum on Star formation, Kavli-Peking University, China, June 2018 (poster)

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

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

## SERVICE, OUTREACH, AND MENTORING

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**Science organizer & Session chair** - SOC and Session chair for "2021 ASTRO 3D Science Meeting", 2021

**Local organizer** - USyd node coordinator for ASTRO 3D NSW Nodes Monthly Meeting, 2021 – present

**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 "SKA in Seoul on H I Science" conference, 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, HTML, Fortran, LaTeX, 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), VERTICO (Virgo Environment Traced In CO), ASTRO 3D (The ARC Centre of Excellence for All Sky Astrophysics in 3 Dimensions), KAS (Korean Astronomy Society)