

# HYERIN CHO (조혜린)

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Homepage: [hyerincho.com](http://hyerincho.com)

[Google Scholar](#) ◇ [Github](#) ◇ [LinkedIn](#)

## EDUCATION

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| <b>Center for Astrophysics   Harvard &amp; Smithsonian</b><br>Ph.D. Candidate in Astronomy and Astrophysics<br><i>Advisor:</i> Professor Ramesh Narayan | Sep. 2020 - (May 2026) |
| <b>Center for Astrophysics   Harvard &amp; Smithsonian</b><br>Master of Arts in Astronomy and Astrophysics  | Sep. 2020 - May 2023   |
| <b>GIST(Gwangju Institute of Science and Technology)</b> , <i>cum laude</i><br><i>B.S. Physics Major / Math Minor</i>                                   | Mar. 2015 - Feb. 2020  |
| <b>California Institute of Technology</b><br><i>Study Abroad Program</i>  | Sep. 2017 - Dec. 2017  |

## PUBLICATIONS

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Google Scholar, arXiv, ads

First-author articles

1. **Cho** et al. 2025 submitted to ApJ, “*Bridging Scales in Black Hole Accretion and Feedback: Relativistic Jet linking the Horizon to the Host Galaxy*”
2. **Cho** and Narayan 2025 submitted to ApJ, “*Variability in Black Hole Accretion: Dependence on Rotational and Magnetic Energy Balance*”
3. **Cho** et al. 2024 ApJ, 977, “*Multizone Modeling of Black Hole Accretion and Feedback in 3D GRMHD: Bridging Vast Spatial and Temporal Scales*”
4. **Cho** et al. 2023 ApJL, 959, “*Bridging Scales in Black Hole Accretion and Feedback: Magnetized Bondi Accretion in 3D GRMHD*”
5. **Cho** and Narayan 2022 ApJ, 932, “*Analytical Model of Disk Evaporation and State Transitions in Accreting Black Holes*”
6. **Cho** et al. 2020 ApJL, 891, “*Spectropolarimetric analysis of FRB 181112 at microsecond resolution: Implications for Fast Radio Burst emission mechanism*”

Co-authored articles

1. Su, ... **Cho**, ... 2025 ApJL, 981, “*Bridging Scales: Coupling the Galactic Nucleus to the Larger Cosmic Environment*”
2. Sutinjo, ... **Cho**, ... 2023 ApJ, 954, “*Calculation and Uncertainty of Fast Radio Burst Structure Based on Smoothed Data*”
3. Scott, **Cho**, ... 2023 A&C, 44, “*CELEBI: The CRAFT Effortless Localisation and Enhanced Burst Inspection pipeline*”
4. Bhandari, ..., **Cho**, ... 2020 ApJL, 901, “*Limits on precursor and afterglow radio emission from a fast radio burst in a star-forming galaxy*”
5. Sammons, ..., **Cho**, ... 2020 ApJ, 900, “*First constraints on compact dark matter from Fast Radio Burst microstructure*”
6. Prochaska, ..., **Cho**, ... 2019 Science, 366, “*The low density and magnetization of a massive galaxy halo exposed by a fast radio burst*”

## AWARDS & FELLOWSHIPS

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|  |                       |
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| <b>ACCESS Maximize</b> (PI: <b>Ramesh Narayan</b> , AST080028) | Oct. 2024 - Sep. 2025 |
| <b>ACCESS Explore</b> (PI: <b>Hyerin Cho</b> , PHY230079)      | Jun. 2023 - Jun. 2024 |
| <b>Ilju Foundation Study Abroad Scholarship</b>                | Aug. 2020 - Jul. 2024 |

Selected as 1 of 6 recipients nationwide in Korea across all disciplines for a prestigious doctoral scholarship (~ \$120,000 USD over four years) awarded to support Ph.D. studies abroad.

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| <b>Talent Award of Korea</b> (대한민국인재상) | Dec. 2020 |
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Awarded by the South Korean government to outstanding young leaders demonstrating excellence, creativity, and public service. Selected as one of the top national recipients representing Korea's next-generation talent.

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| <b>GIST Outstanding Thesis Award</b> (우수논문상) | Feb. 2020 |
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| <b>GIST Future Research Talent Award</b> (미래인재상) | Feb. 2020 |
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| <b>Korea National Science and Engineering Scholarship</b> (국가이공계장학금) | Mar. 2015 - Feb. 2020 |
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A scholarship to fund full tuition for 8 semesters from Korea Student Aid Foundation, Ministry of Education

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| <b>Curtin Institute of Radio Astronomy (CIRA) Summer Studentship</b> | Dec. 2018 - Feb. 2019 |
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| <b>Caltech Summer Undergraduate Research Fellowship</b> | Jun. 2018 - Aug. |
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## TEACHING EXPERIENCE

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|                           |                       |
|---------------------------|-----------------------|
| <i>Teaching Assistant</i> | Sep. 2022 - Dec. 2022 |
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Harvard AY17 Galactic and Extragalactic Astronomy (undergraduate course)

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|---------------------------|-----------------------|
| <i>Teaching Assistant</i> | Sep. 2021 - Dec. 2021 |
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Harvard AY200 Radiative Processes in Astrophysics (graduate course)

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|---------------------------|-----------------------|
| <i>Teaching Assistant</i> | Sep. 2019 - Dec. 2019 |
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GIST MM4016 Introduction to Topology (4th-year course)

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| <i>Teaching Assistant</i> | Mar. 2018 - Jun. 2018 |
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GIST PS3101 Electromagnetism II (3rd-year course)

## ETC.

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| <b>Language</b> | Korean (native), English (fluent) |
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| <b>Hobbies</b> | Yoga, Run, Dance |
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