

# Yasaman Homayouni | Curriculum Vitae

Department of Physics, University of Connecticut – Storrs, CT 06269-3046

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## Employment and Education

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**Department of Physics, University of Connecticut, Storrs CT, United States**

*PhD Candidate in Physics*

2014 - present

**Department of Physics, University of Tehran, Tehran, Iran**

*M.Sc. of Physics*

2011 - 2013

**Department of Science, University of Tabriz, Tabriz, Iran**

*B.Sc. of Physics*

2006 - 2010

## PhD Thesis

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**Title:** *Light Echoes of Black Hole Growth* (Advisor: Prof. Jonathan Trump)

## M.Sc. Thesis

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**Title:** *Sudden Future Cosmic Singularities* (Advisor: Prof. Fatimah Shojai)

## Bachelor Thesis

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**Title:** *Detection of Solar g-mode Oscillation* (Advisor: Prof. Ali Ajabshirzadeh)

## Awarded Proposals and Honors

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**2018:** Hubble Space Telescope : HST-GO-15650, PI: Y. Homayouni "Ultraviolet Echoes of Quasar Accretion Disks", Observed in spring 2019

**2018:** Liverpool Telescope, PI: Y. Homayouni "Accretion-Disc Echo Mapping: Adding Optical to Hubble UV", Observed in spring 2019

**2018:** Spring Doctoral Dissertation Fellowship

**2013:** Ranked top 1% out of 5,000 applicants in National Entrance Examination for PhD program in the field of Physics, Tehran, Iran

## Publications

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**15: Homayouni, Y.,** Trump, R. J., Grier, C. J., et al. 2020, *The Sloan Digital Sky Survey Reverberation Mapping Project: MgII Lag Results from Four years of Monitoring*, arXiv:2005.03663

**14: Homayouni, Y.,** Trump, R. J., Grier, C. J., et al. 2019 *The Sloan Digital Sky Survey Reverberation Mapping Project: Accretion disk sizes from continuum lags*, ApJ, 880, 126, 2019

**13: Homayouni, Y.,** Ajabshirzadeh, A. *Detection of Solar Oscillation(g-mode)* AIPC 1356, 95, 2011

**12: Fonseca Alvarez, G.,** Trump, R. J, **Homayouni, Y.,** et al. 2020 *The Sloan Digital Sky Survey Reverberation Mapping Project: The H-beta Radius-Luminosity relation* (Accepted for publication in ApJ)

- 11:** Dalla Bonta, E., Peterson, B. M., Bentz, M., et al. 2020 *The Sloan Digital Sky Survey Reverberation Mapping Project: Estimating Masses of Black Holes in Quasars with Single-Epoch Spectroscopy*, arXiv:2007.02963
- 10:** Wang, S., Shen, Y., Jiang, L. et al. 2020 *The Sloan Digital Sky Survey Reverberation Mapping Project: How Broad Emission Line Widths Change When Luminosity Changes*, arXiv:2006.06178
- 9:** Li, J., Shen, Y., Ho, L. C. et al. 2020 *The Sloan Digital Sky Survey Reverberation Mapping Project: The  $M_{BH} - Host$  Relations at  $0.2 < z < 0.6$  from Reverberation Mapping and Hubble Space Telescope Imaging*, arXiv:2006.02522
- 8:** Grier, C. J., Shen, Y., Horne, K. et al. 2019, *The Sloan Digital Sky Survey Reverberation Mapping Project: CIV Lag Results from Four years of Data*, ApJ, 887, 38, 2019
- 7:** Dexter, J., Xin, S., Shen, Y. et al. 2019, *The Sloan Digital Sky Survey Reverberation Mapping Project: Accretion and Broad Emission Line Physics from a Hypervariable Quasar*, ApJ, 885, 44, 2019
- 6:** Li, J., Shen, Y., Brandt, W. N. et al. 2019 *The Sloan Digital Sky Survey Reverberation Mapping Project: Comparison of Lag Measurement Methods with Simulated Observations*, ApJ, 884, 119, 2019
- 5:** Shen, Y., Grier, C. J., Horne, K. et al. 2019, *The Sloan Digital Sky Survey Reverberation Mapping Project: Improving Lag Detection with an Extended Multi-Year Baseline*, ApJ, 883, 14, 2019
- 4:** Wang, S., Shen, Y., Jiang, L. et al. 2019, *The Sloan Digital Sky Survey Reverberation Mapping Project: Low-ionization Broad-line Widths and Implications for Virial Black Hole Mass Estimation*, ApJ, 882, 4, 2019
- 3:** Shen, Y., Hall, P., Horne, K. et al. 2019, *The Sloan Digital Sky Survey Reverberation Mapping Project: Sample Characterization*, ApJ, 241, 34, 2019
- 2:** Shen, Y., Hall, P., Horne, K. et al. 2018 *The Sloan Digital Sky Survey Reverberation Mapping Project: Sample Characterization*, ApJS, 241, 34, 2019
- 1:** Grier, C. J., Trump, R. J., Shen, Y. et al. 2017 *The Sloan Digital Sky Survey Reverberation Mapping Project:  $H\alpha$  and  $H\beta$  reverberation measurements from first-year spectroscopy and photometry*, ApJ 851, 21.

## Selected Service

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**Fall 2019:** Reviewer for MNRAS Journal

**Fall 2018:** Treasurer of the Woman in Physics Group, University of Connecticut

**Fall 2017:** Organizer of UConn Astronomy Journal Club

**Fall 2017:** Vice President of Iranian Cultural Organization of UConn

**Fall 16 - Spring 17:** Event Coordinator of Iranian Cultural Organization of UConn

**2012 - 2014:** Member of the Physics Society of Iran

**2002 - 2005:** Member of Iranian Young Physicist Association

## Outreach

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**Fall 2018:** Panelist for the "Woman in Workplace", by Political and Proud community

**Spring 2018:** Connecticut Science Olympiad Judge

**Fall 2017:** Guest lecturer at East Lyme Highschool on Black hole physics, East Lyme, Connecticut

**Summer 2017:** Eclipse day at Talcott Mountain Observatory, Avon, Connecticut

**Spring 2017:** Connecticut Science Olympiad Judge

**Summer 2016:** Summer Workshop KASET: Kids are Scientist & Engineers Too University of Connecticut

## Conferences & Workshops

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**July 2020:** 2020 Summer All-Zoom Epoch of Reionization Astronomy Conference (SAZERAC), LSST and the Mass Census of Supermassive Black Holes at Cosmic Dawn, Remote Conference, **Poster Presentation**

**June 2020:** *2020 SDSS Collaboration Meeting, MgII Reverberation Mapping Results from multi-years of SDSS-RM*, New York (Remote), United States, **Oral Presentation**

**Oct 2019:** *2019 Accretion History of AGNs, SDSS-RM and the Future of Industrial-Scale Reverberation Mapping*, Miami, United States, **Oral Presentation**

**Sep 2019:** *2019 Mapping Central regions of Black Holes, Mapping Supermassive Black Hole Accretion Disks with SDSS-RM*, Guilin, China **Oral Presentation**

**June 2019:** *2019 SDSS Collaboration Meeting, Mapping the Growth of Supermassive Black Holes*, Ensenada, Mexico, **Poster Presentation**

**June 2018:** *2018 AstroFrontiers Meeting, Mapping the Growth of Supermassive Black Holes* Portland, United States, **Poster Presentation**

**May 2018:** *2018 Galaxy Formation and Compact Objects Meeting, Accretion disk sizes from Continuum Reverberation Mapping*, Center for Computational Astrophysics, New York, United States, **Poster Presentation**

**May 2018:** *2018 NERQUAM Meeting, Mapping the Growth of Supermassive Black Holes* Yale University, New Haven, United States, **Oral Presentation**

**Nov 2017:** *PyData NYC 2017 Workshop*, Microsoft, New York City, New York, United States

**May 2017:** *2017 NERQUAM Meeting, Light Echoes of Black Hole Growth* Boston University, Boston, United States, **Poster Presentation**

**Aug 2016:** *SciCoder-8 2016 Workshop*, Yale University, New Haven, Connecticut, United States