Maryam Dehghanian

177 Chem.-Phys. Building, University of Kentucky, 505 Rose Street, Lexington KY 40506-0055
Phone number: 859-705-9678 E-mail: M.dehghanian@uky.edu

Educational Background

Ph. D. 2018- 2021	Physics, University of Kentucky
Master of Science 2016-2018	Physics, University of Kentucky
Master of Science 2010-2012	Particle Physics, Sabzevar University, Iran
Bachelor of Science 2004-2008	Physics, University of Kashan, Iran

Professional Appointments

- May 2020-Present: Graduate Research Associate, Department of Physics and Astronomy, UKy
- May 2019-May2020: MacAdam Fellowship, Department of Physics and Astronomy, UKy
- Jan 2017-May 2019: Graduate Research Associate, Department of Physics and Astronomy, UKy
- Sep 2016- Jan 2017: Graduate Teaching Associate, Department of Physics and Astronomy, UKy

Bibliography

Refereed papers:

- "*Space Telescope and Optical Reverberation Mapping Project. XIII. An Atlas of UV and X-ray Spectroscopic Signatures of the Disk Wind in NGC 5548 s*", **Dehghanian et al**. 2021, ApJ, 906, 14 (14pp)

- *"Space Telescope and Optical Reverberation Mapping Project. XII. Broad-line Region Modeling of NGC 5548",* Williams et al. (157 more authors, including **Dehghanian, M**), 2020, ApJ, 902, 74 (26 pp)
- *"Space Telescope and Optical Reverberation Mapping Project. XI. Disk-wind characteristics and contributions to the very broad emission lines of NGC 5548",* **Dehghanian et al**., (24 more authors), 2020a, ApJ, 898, 141 (8pp).
- "*A wind-based unification model for NGC 5548: spectral holidays, non-disk emission, and implications for changing-look quasars*", **Dehghanian, M., et al**. (11 more authors), 2019b, ApJL, 882, 30 (6 pp).
- "*Space Telescope and Optical Reverberation Mapping Project. X: Understanding the Absorption-Line Holiday*", **Dehghanian, M., et al**. (29 more authors), 2019, ApJ, 877, 119 (10pp).

- "*Space Telescope and Optical Reverberation Mapping Project. IX. Velocity-Delay Maps for Broad Emission Lines in NGC 5548*", Horne, K. et al. (157 more authors, including **Dehghanian, M**) 2020arXiv200301448.
- "*Current and future development of the photoionization code Cloudy*", van Hoof, P.A.M., Van de Steene, G.C., Guzm´an, F., **Dehghanian, M.,** M. Chatzikos and G.J. Ferland, 2019, accepted for publication in Spectral Line Shapes in Astrophysics and Related Topics.
- "*Space Telescope and Optical Reverberation Mapping Project. VIII. Time Variability of Emission and Absorption in NGC 5548 Based on Modeling the Ultraviolet Spectrum*", Kriss, G. A., et al. (166 more authors, including **Dehghanian, M**.), 2019, ApJ, 881, 153 (36 pp).
- "*H-, He-like recombination spectra - III. n-changing collisions in highly excited Rydberg states and their impact on the radio, IR, and optical recombination lines*", Guzmán, F.; Chatzikos, M., van Hoof, P. A. M., Balser, Dana S., **Dehghanian, M**., Badnell, N. R., Ferland, G. J., 2019, MNRAS, 486, 1003(16 pp).

Conference papers:

- "*HST insights into the missing piece of the AGN feedback puzzle: The role of disk winds*", Dehghanian, M. Ferland, G. J., Kriss, G. A., Peterson, B. M., Guzman, F., Chatzikos, 2020, AAS#235, 52, 436.09
- "*The impact of inaccurate collisional excitation rates on radio recombination line observations*", Guzmán, F.; Chatzikos, M., van Hoof, P. A. M., Balser, Dana S., Dehghanian, M.; Badnell, N. R., Ferland, G. J.,
  2019, AAS Meeting #233, id.412.08
- "*Uncorrelated behavior f narrow absorption Line in NGC5548*", Dehghanian, M.; Ferland, G. J., Kriss, G. A., Peterson, B. M., Guzman, F., Chatzikos, M., Van Hoof, P., 2019, AAS Meeting #233, id.243.11
- "*Calculating Mass Spectrum of MSSM Particles Considering R-parity Violating Term*", Dehghanian, M., Farzaneh, A., 2011, 2nd National particle physics Conference, Semnan, Iran

Research Interests

- AGN
- Photoionization
- Supermassive black holes
- Intergalactic medium
- Reverberation mapping
- Quantitative spectroscopy
- Quasars
- Atomic physics
- Galaxy clusters

Awards and Honors

- Keith B. MacAdam Graduate Excellence Fellowship ($20000+tuition)**,** 2019

- Max Steckler Fellowship ($3300), the University of Kentucky, 2017
- Best presented poster ($1000), 2nd National particle physics Conference, Iran, 2011

Professional Memberships

- 2018-present: American Astronomical Society, Junior member.
- 2018-present: Graduate Student Council, Astrophysics Representative.
- 2017-present: American Physical Society, Junior member.

Skills

- Cloudy scripting
- Mathematica
- Python scripting
- html5+css
- Statistical analysis
- Data science
- R scripting
- CIAO

Talks

- Kentucky American Astronomical Society (KAAS), University of Louisville, March 2020
- American Astronomical Society (AAS), Honolulu, HI, Jan 2020
- Astrophysical Seminar, The University of Kentucky, Sep 2019
- **Invited talk**: STORM annual meeting, Space Telescope Science Institute, July 2019
- **Invited talk:** Astrophysical Seminar, Virginia Polytechnic Institute and State University, April 2019
- Kentucky American Astronomical Society (KAAS), Morehead State University, April 2019
- **Invited talk:** Astrophysical Seminar, The University of Kentucky, Jan 2019
- STORM annual meeting, Georgia State University, August 2017

Attended Workshops

- Chandra/CIAO Workshop at AAS 235th AAS, Honolulu, 2020
- Astrostatistics Summer School, Penn State, 2019
- Cloudy Workshop, University of Kentucky, 2019
- Introduction to Software Carpentry, 233rd AAS, Seattle, 2019