

Ahmad Mehrabi

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Education

- 2009–2013 **Ph.D.**, *Sharif University of Technology*, Tehran, Iran.
- 2007–2009 **M.Sc.**, *Sharif University of Technology*, Tehran, Iran.
- 2003–2007 **B.Sc.**, *Kurdistan University*, Sanandaj, Iran.

Master thesis

- Title *Black Hole Detection By Microlensing in Binary System*
- Supervisors Sohrab Rahvar
- Description In this thesis, possibility of a white dwarf detection in a binary system has been studied through microlensing. A few years later such a system has been detected in the Kepler data.

Ph.D. thesis

- Title *Wave optics effects in microlensing of a binary lenses*
- Supervisors Sohrab Rahvar
- Description The diffractive microlensing in a binary system has been studied in this thesis. Considering long wavelengths, the effects of wave optics appears in the light curve of a lensed system and provides more information from the system.

Current Position

- Associate Professor : Bu-Ali Sina University, Hamedan, Iran. (September 2013-)

Research Interest

- Gravitational microlensing and diffractive lensing
- Machine learning approaches in cosmological data
- Data analysis and Bayesian inference of cosmological parameters
- Large scale structures, structure formation in different dark energy scenarios
- Computer vision in medical images

Awards and conference organizing

- Scientific committee in 23 rd meeting on research in astronomy May 2020
- Scientific committee in Iranian National Gravity and Cosmology annual meeting January 2020
- Received an honorable mention for an essay in the Gravity Research Foundation (GRF) award -

2017

- Awarded as qualified researcher in Iran Science Elites Federation, Academic year 2016-2017

———— National or International conferences

- Scientific committee in 23 rd meeting on research in astronomy May 2020
- Scientific committee in Iranian National Gravity and Cosmology annual meeting January 2020
- Iranian National Gravity and Cosmology annual meeting January 2020 - Tehran University
- Workshop on science of data science, Trieste, October 2019
- 21th Meeting on Research in Astronomy, IASBS, Zanjan, May 2018
- 20th Meeting on Research in Astronomy, IASBS, Zanjan, 11-12 May 2017
- International Symposium on cosmology and Particle Astrophysics (CosPA 2016), The University of Sydney, Sydney, 2016
- Summer School on Cosmology, ICTP, Trieste, July, 2016
- International conference of *Tehran meeting on Modified Gravity* , School of Astronomy, IPM, 23-26 January 2016
- Iranian National Gravity and Cosmology annual meeting January 2016 - Shahid Beheshti University
- International conference of *Galaxies, inside and out*, School of Astronomy, IPM, 25-28 January 2015
- 23 Spring Physics Conference, IPM, May 2016
- 21 Spring Physics Conference, IPM, May 2014

———— Manager Experience

Head of physics department (Oct 2018-Dec 2022)

———— Computer skills

- Kotlin for android devices
- Python programming
- Tensorflow and pytorch for deep learning
- Pymc3 for parameter inference
- Mathematica
- C++