



MARYAM VAZIRNIA | CURRICULUM VITAE
PHYSICS RESEARCHER AND MACHINE LEARNING LEARNER

PERSONAL INFORMATION

Address: Qom, Iran
Date of birth:
06/10/1988 Qom
Nationality: Iranian



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SOCIAL PROFILES



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github.com/Maryam-Vazirnia



maryam-vazirnia-96674178/



Maryam-vazirnia



thesky.messengers



@Maryam_physicist

OBJECTIVE

Passionate about science and creative works, with strong technical and analysis skills for working in a team.

I am interested in cosmology and machine learning. I welcome projects related to these fields.

I am hardworking in my work and welcome the opinions and criticisms of my colleagues. I try to keep my knowledge up to date and if I do not know something, I try to learn.

EDUCATION

DOCTORATE OF PHYSICS, BU-ALI SINA UNIVERSITY, HAMEDAN, IRAN

* October 2017 – till now

Supervisors: Dr. Ahmad Mehrabi

"Investigation of cosmological parameters using methods independent-model of statistical. " I submitted this thesis in order to obtain a doctorate.

I presented the generalities of cosmology and introduced data analysis by introducing various statistical methods.

I analyzed cosmological data and obtained various cosmological parameters. In this dissertation, I used machine learning methods

MASTER OF PHYSICS, ALZAHRA UNIVERSITY, TEHRAN, IRAN

* October 2012 – February 2015

Supervisors: Dr. Mohammad Taghi Mirtorabi

"Production of black holes in the early universe". In this thesis that I submitted in order to receive a master's degree; I did a thorough research on the General relativity and metric and production of black holes in the early universe.

I calculated the mass distribution of primordial black holes in the universe by MATLAB software. I looked at black holes as a candidate for dark matter.

BACHELOR OF PHYSICS, QOM UNIVERSITY, QOM, IRAN

* September 2006 – February 2011

Supervisors: Dr. Mohammad Mahdi Etefaghi

LANGUAGES

★★★★☆ English

☆☆☆☆☆ German

SKILLS

★★★★★ Ability to
Work in a Team

★★★★★ Computer
Skills

★★★★★ Microsoft
Office Word

★★★★★ Microsoft
PowerPoint

★★★★★ Teacher
physics and math

★★★★★ Microsoft
Office

★★★★☆ LaTeX

★★★★☆ python

★★★★☆ Microsoft
Excel

★★★☆☆ Linux

★★☆☆☆ Machine
Learning

★★☆☆☆ HTML

★★☆☆☆ CosmoMc

"Detection of neutrinos ", This research is a project that I presented in my Bachelor course. I research about neutrinos and report on ways of neutrino detection. This project was accepted with an excellent grade

EXPERIENCE

Scientific expert at Imam-Hadi Institute, Qom, Iran

** May 2011 – September 2012*

Imam-Hadi Institute in Qom Province is an educational institution that has non-governmental schools throughout Iran to serve students. My responsibility as a scientific expert was to review books and design questions and design student workbooks.

Private Tutor at self-employment, Qom, Iran

** January 2012- till now*

I have started teaching math and physics to students.

Expert in astronomy and physics at Astronomy Center of Qom, Qom, Iran

** May 2013- till now*

The Astronomy Center of Qom Province offers astronomy and physics training courses, and I teach these courses as a teacher as a project.

Professor at Qom University, Qom, Iran

** October 2015 – June 2017*

I have taught basic physics and physics lab courses in Qom University

Teacher at Center for the intellectual development of children and teenagers, Qom, Iran

** June 2021- till now*

This center works for children and teenagers. I teach astronomy as a teacher

CONFERENCES, SCHOOLS AND WORKSHOPS

** Business and entrepreneurship skills,*

Jahad of University, Qom, Iran, January 2011

** Individual development planning,*

Alzahra University, Tehran, Iran, October 2013

RESEARCH INTERESTS

Cosmology
Data Analysis and
modelling
Machine Learning
Gravity
Dark Energy

HOBBIES AND INTERESTS

Read book
Exercise
Psychology
Watch movie

- * ***National Conference on Gravity and Cosmology,***
Iranian Physics Association of Shahid Beheshti
University, Tehran, Iran, February 2013
- * ***National Conference on Gravity and Cosmology,***
Iranian Physics Association of Tehran University
, Tehran, Iran, February 2014
- * ***One-day contemplation of black holes,***
Institute for Research in Fundamental Sciences
(IPM), Tehran, Iran, February 2014
- * ***Training workshop CosmoMc,***
Shahid Beheshti University, Tehran, Iran, June 2018
- * ***One-day gathering of Iranian physics,***
Iranian Physics Association of Tehran University
, Tehran, Iran, August 2019
- * ***Spring School of Physics,***
Institute for Research in Fundamental Sciences
(IPM), Tehran, Iran, June 2019
- * ***National Conference on Gravity and Cosmology,***
Iranian Physics Association of Tehran University
, Tehran, Iran, January 2020

TALKS AND PRESENTATIONS

- * World Astronomy Day, Astronomy Center of Qom, May 2007
Talk: "**the Big Bang**"
- * Astronomy workshop, Alzahra University in Tehran, March 2013
Talk: "**Cool white dwarfs** "
- * Astronomy workshop, Astronomy Center of Qom, July 2016
Talk: "**star formation**"
- * Astronomy workshop, Primary schools in Qom province, November
2016
Talk: "**Meteors**"
- * Data analysis workshop, Bu-Ali Sina University in Hamedan, May 2018
Talk: "**Data analysis by methods independent -model
statistical**"

HONORS

Ranked 600th Among More Than 800,000 Participants in Master entrance exam in physics, Iran, September 2012

Ranked 700th Among More Than 20,000 Participants in Konkour of PhD in physics, Iran. September 2017

PUBLISHED

* Author of various articles related to Recognize the star in Astronomy Magazine (in Persian), <http://www.nojum.ir/> April 2021

* Two articles under review by ISI journals

MEMBERSHIP

* Moajembashi NGO, Activity in astronomy, Qom, Iran, September 2019- till now

* Iranian Astronomical Society, Tehran, Iran, November, 2019- till now

REFERENCES

* Dr. Ahmad Mehrabi from Bu-Ali Sina University, Hamedan, Iran
ahmad.mehraby@gmail.com

* Dr. Mohammad Malekjani from Bu-Ali Sina University, Hamedan, Iran
malekjani@basu.ac.ir

* Dr. Mohammad Taghi Mirtorabi from Alzahra University, Tehran, Iran
torabi@alzahra.ac.ir

* Dr. Sepehr Arbabi Bidgolli from Wuerzburg University, Bavaria, Germany
sepehr.arbabi@gmail.com