

Reza Monadi

Contact

Address Department of Physics and Astronomy, UC Riverside, CA 92521
Email reza.monadi@email.ucr.edu

Education

Ph.D. **University of California, Riverside, California, USA**, 2017-present.
M.Sc. **Shahid Beheshti University, Tehran, Iran**, 2010-2013.
B.Sc. **University of Guilan, Rasht, Iran**, 2005-2009.

Research Experience

PhD **More Precise Selection of Extremely Red Quasars with Machine Learning**,
Project-A **Advisor:** Fredrick Hamann,
Co-advisor: Simeon Bird.
PhD **Studying CIV in SDSS with Machine Learning**,
Project-B **Advisor:** Simeon Bird.
M.Sc Project **Statistical Study of Glitches in Radio Pulsars**,
Advisor: S. M. S. Movahed.
B.Sc Project **Designing a Solar Positioning System**,
Advisor: H.R. Mashayekhi.

Skills

O.S. **Linux, Macintosh, Microsoft Windows.**
Software **Libre Office, LaTeX, Visual Studio, ...**
Programming **Python, Fortran, Matlab.**
Libraries **Scipy, Matplotlib, Sci-kit learn, PyClustering.**
Astronomical **Cloudy, PSRCHIVE.**
Packages
Machine **Clustering, Classification, PCA, SVM....**
Learning
Statistics **Sample comparison, Correlation, Optimization,**

Publications

- A Gaussian Model for Anisotropic Strange Quark Stars: H. Panahi, **R. Monadi** and I. Eghdamis, Chinese Physics Letters 33 (7), 072601, 2016,
- Statistical Analysis of I Stokes Parameter of Millisecond Pulsars, arXiv:1604.00372

Presentation

Poster **Presice Seclection of Extremely Red Quasars**, *Keck Science Meeting*, 2019, UCLA.

Data-Science Courses

- Statistical Astronomy, Grade: A
- Computational Physics, Grade: 19/20
- Physics of Complex Systems, Grade: 18/20

Data-Science Workshop

- Optical Data Reduction Workshop, IPM, Tehran, Iran, 2012

Outreach Activities

Cosmic Thursdays **Helping in organization**, *UCR*, 2019.

Apollo Event **Collaboration in hands-on activities**, *UCR*, 2019.

MESA 2018 **Scientific Judge**, *UCR*, 2018, High school student competitio.

Astronomy Sceince Fair **Scientific Organizer**, *Thaqib Astronomical Association*, Rasht, Iran, 2017.

Teaching Experience

Lab TA **Physics 40C**, *UCR*, Fall of 2017.

Lab TA **Physics 2LB**, *UCR*, Winter of 2017 and 2018.

Lab TA **Basic Circuits**, *University of Guilan*, 2015-2017.

Teacher **Introductory Astronomy**, *Mirza Kouchak High School*, 2015-2017.

Leadership Experiences

Co-advisor **Masters thesis in computational physics**, *University of Guilan*, Iran, Rasht. 2014-2016

Advisor **Astronomical projects for high school students**, *Mirza Kouchak High School*, Iran, Rasht. 2016-2017

Honors and Awards

- Dean's fellow award, UCR, 2017-present
- Top 2% in PhDD. program applicants for physics in Iran, 2013
- Top 1% in M.Sc. program applicants for physics in Iran, 2010

References

- **Frederick Hamann:** fhamann@ucr.edu
- **Simeon Bird:** sbird@ucr.edu
- **Seyed Mohamad Sadegh Movahed:** s.m.movahed@ipm.ir