Ali Salehi

+98-913-785-6210 | alisalehi076@gmail.com | LinkedIn | GitHub | ORCID

EDUCATION

Shahid Beheshti University   September 2020 – Present
Masters of Science in Physics, Cosmology and Gravitation

Isfahan University of Technology   September 2016 – August 2020
Bachelor of Science in Physics   *Cumulative GPA: 18.27/20*

EXPERIENCE

Chess coach and tech support   April 2020 – Present
Ebrahim Naami's chess club   *Tajrish sq., Tehran*

- Design and maintenance of chessnaami.ir
- Organizing weekly online chess tournaments
- Teaching elementary and intermediate level chess

Teacher's assistant of astrophysics course   February 2020 – June 2020
Isfahan University of Technology

- Correcting papers and solving problems for the class participants

President of Scientific Society of Astronomy   September 2018 – August 2019
Isfahan University of Technology

- Organized weekly observations and stargazing events on the roof of the physics department
- Organized two observation events in the Varzaneh desert
- Managed a team of eight people for astronomy stalls in physics day annual exhibition
- Managed a stall in annual Harkat exhibition for university's scientific societies
- Managed and organized various other programs including lectures and workshops, etc. in the physics department

Council member of Scientific Society of Astronomy September 2017 – August 2018
Isfahan University of Technology

- Operated telescopes on weekly observations and stargazing events on the roof of the physics department
- helped organized four observation events in the Varzaneh desert
- Operated a solar telescope in physics day annual exhibition
- Took part in annual Harkat exhibition for university's scientific societies
- Helped in organizing various other programs including lectures and workshops, etc. in the physics department

PROJECTS

Preparing and testing properties of $(K_{0.5}Na_{0.5})NbO_3$ (KNN) based lead-free ferroelectric ceramics
Condensed Matter, Electronics, Python

August 2020 – February 2021

- Developed a tool to plot hysteresis loops of materials, compare them and calculate several properties using python
- Helped synthesize *KNN* based ceramics with different dopings
- Worked with and helped repairing various laboratory instruments

Detecting the inner regions of discs around sources of microlensing with Roman Space Telescope
Astrophysics, Gravitational Microlensing, Python, C++

August 2019 – August 2020

- Developed codes to calculate properties of microlensing events using *MulensModel* python library
- Developed codes to optimize model parameters for lensing events using *scipy* and *numpy* python libraries
- Took part in writing a journal paper which was published in *MNRAS*

Publications

Detecting the inner regions of discs around sources of microlensing with *Roman Space Telescope*
S. Sajadian, A. Salehi,
Monthly Notices of the Royal Astronomical Society,
Volume 498, Issue 1, 11 October 2020, Pages 1298–1307,
doi:10.1093/mnras/staa2377

Awards

National Olympiad of Physics for college students (2019)   13th place

Knowledge & Skills

Languages

- **Farsi** (native)
- **English** (fluent)
- **German** (basic)

Technical

- **Scientific programming with python**
    Libraries: numpy, scipy, sympy, pandas, matplotlib, MulensModel, netwokx
- **Familiar with**
    C/C++, Cadabra
- **Other tools**
    Linux, LaTeX, Beamer, Wordpress