Ahmad Saeed



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Summary

As a highly qualified and experienced Assistant Professor with over 15 years of teaching and research experience in Physics, I have developed exceptional skills in critical thinking, problem-solving and collaboration. My solid educational foundation in Physics and Mathematics enable me to devise solutions independently while fostering positive teamwork. In addition to my expertise in Physics and Mathematics, I am also deeply passionate about exploring new frontiers in Astronomy. I have a keen interest in this field and firmly believe that it holds the key to unlocking some of the universe's most profound mysteries. As a result I started teaching Astronomy in 2021 with the aim to carry on doing so in future. My enthusiasm for astronomy drives me to stay up-to-date with the latest developments in the field and constantly seek out opportunities to expand my knowledge.

Education & Training

- **M.Phil (Physics):** Federal Urdu university of arts, science and technology, Islamabad.
- M.Sc (Physics): University of Karachi, Karachi.
- Certificate (Microwave Transmission): Institute of Signals, Sensors and Soft Skills, Islamabad.

- **Certificate (Modern Methods of Mathematical Analysis):** Mathematical Sciences Research Centre, Federal Urdu University of Arts, Science and Technology, Karachi campus.
- Certificate (Nanotechnology): International Centre for Chemical Sciences, Karachi.
- **Certificate (Research Methodology):** Learning Innovation Division, Higher Education Commission Islamabad.
- Internship (Medical Physics): Aga khan Medical University, Karachi.

Programming Skills

- Working knowledge of Python, Astropy and other different libraries via Jupyter Notebook.
- COMSOL Simulation Package.

Research Experience

- Currently supervising one M.Phil level student on the project "Astrophysics with white dwarf".
- Two students have recently completed their BS degree final year research work on the following titles:

i) "Interpreting Einstein's field equations"

ii) "Gravitational lensing: Scope and limitations".

- In my M.Phil research work, I studied "Effect of Alpha particles irradiation of deep levels in Ruthenium doped p-type GaAs".
- Supervise 2-3 students of BS program in their final year research projects each year.

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Published Work

"Effect of zinc concentration on physical properties of copper oxide". Journal of Material Science: Materials in Electronics Link.springer.com/article/10.1007/s10854-051-3651-6

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Higher Education Commission Funded Projects

- Collaborated with professor Tahira Arshad from Tennessee University USA, on "Development of Physics Education from School to University Level" (May 2006-October 2006).
- Collaborated with professor Abdul Aziz Bhatti from Punjab University on "Undergraduate Students' Apprehension and Difficulties of Quantum Mechanics" (March 2012-July 2012).

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Teaching Experience

- Assistant Professor at Federal Urdu University of Arts, Science and Technology(FUUAST) since July 2005.
- Teaching the following subjects in current semester: Astronomy, Mathematical Physics and Quantum Mechanics
- Previously taught the following subjects in the Physics and affiliated departments: Quantum Mechanics, Electromagnetism, Classical Mechanics, Material Science, Statistical Mechanics, Oscillations and Waves, Modern Physics, Mathematical Physics, Relativity, Nuclear Physics Computational Physics and Astronomy.
- Visiting Lecturer at other universities and institutes for various subjects such as Thermodynamics, Electromagnetics, Engineering Physics, Engineering Mathematics and Nanotechnology.
- Teaching through my own You Tube channel "Physics ki Dunya".

Extra-curricular Activities

- Running Applied Physics Society.
- Active member of Applied Physics Hiking Club.

Interests and Conferences

- Astronomy and Space Sciences, Quantum Physics & Nanotechnology, Physics Education.
- Actively participate in conferences, seminars and workshops related to my interests.