Dr. ISMAT NAEEM

EDUCATION

PhD. Physics (Theoretical Plasma Physics) — **2021**
Quaid-i-Azam University, Islamabad

M.Phil. Physics (Theoretical Plasma Physics) — **2008**
Quaid-i-Azam University, Islamabad.

M.Sc. Physics — **2006**
Quaid-i-Azam University, Islamabad.

B.Sc. — **2003**
Islamabad College for Girls F-6/2, Islamabad.

HSSC — **2001**
Islamabad College for Girls F-6/2, Islamabad.

SSC Science — **1999**
F.G Girls Model School G-6/1-3 Islamabad

TEACHING EXPERIENCE

Lecturer — **FEB 2013 to Present**
Department of Physics
International Islamic University, Islamabad
(12 years,7 months)

Lecturer — **DEC 2010 to FEB 2013**
F.G Post Graduate College for Girls Wah Cantt
Federal Government Cantt and Garrison Institute
(2 year,2 months)

Lecturer — **FEB 2008 to DEC 2010**
Bahria College E-8 Naval Complex Islamabad
(2 years,10 months)

Lecturer — **AUG 2006 to FEB 2008**
Islamabad College for Girls F-6/2, Islamabad.
(1 year,6 months)

Lecturer — **JAN 2006 to AUG 2006**
Ghazali College for Women, Islamabad.
(8 months)

PUBLICATIONS

1. **Ismat Naeem**, Arshad M. Mirza, W. Masood, T. Farid, Magnetic electron-drift vortex modes in an inhomogeneous quantum plasma, J. Plasma Physics 77, 367–375 (2011).

2. Nazia Batool, **Ismat Naeem**, Arshad M. Mirza and W. Masood, Ion-acoustic vortex formation in a non-uniform two-electron-temperature magnetoplasma with sheared ion flow, J. Plasma Physics 78, 65-69 (2012).

3. **Ismat Naeem**, S. Ali, P. H. Sakanaka and Arshad M. Mirza, Formation of solitary waves and oscillatory shocklets in a two-temperature electron kappa distributed plasma, Phys. Plasmas 24, 042109 (2017).

4. S. Ali, **Ismat Naeem** and Arshad M. Mirza, Large-amplitude dust acoustic shocklets in non-Maxwellian dusty plasmas 24, 103706 (2017).

5. **Ismat Naeem**, W. Masood and Arshad M. Mirza, Shear flow driven counter rotating vortices in non-uniform magnetoplasmas with warm ions and generalized (r, q) distributed electrons, Physica Scripta 94, Number 12 (2019).

6. **Ismat Naeem,** W. Masood and Arshad M. Mirza, Dipolar and Kelvin-Stuart's cat's eyes vortices in magnetoplasmas with non-Maxwellian electron distributions, Astrophysics and Space Sciences 365, 52(1-11) (2020).

7. **Ismat Naeem**, Z. Ehsan, Arshad M. Mirza and G. Murtaza, Shocklets in the Comet Halley Plasma Phys. Plasmas 27, 043703 (2020).

8. **Ismat Naeem**, S. Ali, M. Irfan and Arshad M. Mirza, Ion-acoustic shocklets in Ionospheric plasma with nonthermal electrons, Physics of Letter A 384,126568 (2020).

9. **Ismat Naeem**, S. Ali and Arshad M. Mirza, Magnetosonic shocklets in electron-positron-ion plasmas, Physica Scripta, 95, 075601 (2020).

10. **Ismat Naeem**, W. Masood, N. Batool and Arshad M. Mirza, ITG mode driven vortices in spatially inhomogeneous magnetoplasma with generalized (r, q) distribution, Physica Scripta 95, 105606 (2020).

11. Sanawar Ali, S. Ali**, Ismat Naeem**, Yas Al-Hadeethi, Electron-acoustic solitary and shocklet structures with two-temperature relativistic degenerate electrons, Phys. Scr. 98, 025605 (2023).

12. Weaam Alhejaili, **Ismat Naeem**, Waqas Masood, Sherif. M. E. Ismaeel, and S. El-Tantawy, Tripolar vortices in inhomogeneous magnetoplasmas in the presence of non-Maxwellian electron distributions, Physics of Fluids 35, 073108 (2023).

13. M Alharbi, S Ali, **Ismat Naeem**, Yas Al-Hadeethi, Large-amplitude shocklets with trapped hot-electrons in space plasmas, Journal of Geophysical Research: Space Physics,128, e2023JA031401 (2023).

HONORS & AWARDS

Secured Second Position in B.Sc. Examination
Islamabad College for Girls F-6/2, Islamabad

Roll of Honour in B.Sc.
Islamabad College for Girls F-6/2, Islamabad

Departmental Merit Scholarship in M.Phil.
Quaid-i-Azam University, Islamabad

Best Teacher Award.

Bahria College E-8 Naval Complex Islamabad
Session 2009-2011

F.G Post Graduate College for Girls Wah Cantt
Session 2011-2013

MS/BS students supervised

1) Ms. Zain Nawaz Reg No. 649-FBAS/MSPHY/S22
Thesis Title: Drift Soliton and Shocks Waves in Non- Maxwellian Plasma

Date of Completion: January 2024

2) Ms. Noor ul Ain Ayesha Reg No. 656-FBAS/MSPHY/S22

Thesis Title: Electrostatic Vortices in Two Temperature Electron Magnetoplasma

Date of Completion: January 2024

3) Ms. Qandeel Ghazal Reg No. 680-FBAS/MSPHY/F22

Thesis Title: Nonlinear Electrostatic Structures in Relativistic Electron-ion Plasma with Warm Ions and Trapped Electrons

Date of Completion: September 2024

4) Ms Amna Shabbir Bukhari Reg No. 705-FOS/MSPHY/F23

Thesis Title: Electrostatic Drift Solitary Structures with Superthermal Electrons

Date of Completion: September 2025

5) Ms Alia Yasmeen Reg No. 699-FOS/MSPHY/F23

Thesis Title: Ion Temperature Gradient Mode Driven Soliton and Shocks in Electron Positron Ion Plasma

Date of Completion: September 2025

BS Student Supervised: More than 50 BS students in their final year project.

REFERENCES

1) Prof Dr. Arshad M. Mirza

Department of Physics UMT, Lahore

Department of Physics Quaid-i-Azam University, Islamabad

2) Prof Dr. Waqas Masood

Department of Physics COMSATS University, Islamabad.

3) Dr. Shahid Ali (Associate Professor)

National Centre for Physics Islamabad.