

PUBLICATIONS
FIRST AUTHOR

23. **Danehkar, A.**, Nowak, M. A., Lee, J. C., Kriss, G. A., Young, A. J., Hardcastle, M. J., Chakravorty, S., Fang, T., Neilsen, J., Rahoui, F., and Smith, R. K. 2018. *The Ultra-fast Outflow of the Quasar PG 1211+143 as Viewed by Time-averaged Chandra Grating Spectroscopy*, *ApJ*, 853, 165. doi:10.3847/1538-4357/aaa427
22. **Danehkar, A.**, Nowak, M. A., Lee, J. C., and Smith, R. K. 2018. *MPI_XSTAR: MPI-based parallelization of the XSTAR photoionization program*, *PASP*, 130, 024501. doi:10.1088/1538-3873/aa9dff
21. **Danehkar, A.**, Karovska, M., Maksym, W. P., and Montez Jr, R. 2018. *Mapping Excitation in the Inner Regions of the Planetary Nebula NGC 5189 Using HST WFC3 Imaging*, *ApJ*, 852, 87. doi:10.3847/1538-4357/aa9e8c
20. **Danehkar, A.**, Q. A. Parker, and W. Steffen. 2016. *Fast, low-ionization emission regions of the planetary nebula M2-42*, *AJ*, 151, 38. doi:10.3847/0004-6256/151/2/38
19. **Danehkar, A.**, and Parker, Q. A. 2015. *Spatially resolved kinematic observations of the planetary nebulae Hen 3-1333 and Hen 2-113*, *MNRAS:Letters*, 449, L56–L59. doi:10.1093/mnrasl/slv022
18. **Danehkar, A.**, Todt, H., Ercolano, B., and Kniazev, A. Y. 2014. *Observations and three-dimensional photoionization modelling of the Wolf-Rayet planetary nebula Abell 48*, *MNRAS*, 439, 3605–3615. doi:10.1093/mnras/stu203
17. **Danehkar, A.**, Parker, Q. A., and Ercolano, B. 2013. *Observations and three-dimensional ionization structure of the planetary nebula SuWt 2*, *MNRAS*, 434, 1513–1530. doi:10.1093/mnras/stt1116
16. **Danehkar, A.**, Saini, N. S., Hellberg, M. A., and Kourakis, I. 2011. *Electron-acoustic solitary waves in the presence of a suprathermal electron component*, *Phys. Plasmas*, 18, 072902. doi:10.1063/1.3606365

SOLE AUTHOR

15. **Danehkar, A.** 2019. *Electric-magnetic duality in gravity and higher-spin fields*, *Front.in Phys.*, 6, 146. doi:10.3389/fphy.2018.00146
14. **Danehkar, A.** 2018. *Electron beam-plasma interaction and electron-acoustic solitary waves in a plasma with suprathermal electrons*, *Plasma Phys. Control. Fusion*, 60, 065010. doi:10.1088/1361-6587/aabc40
13. **Danehkar, A.** 2018. *Bi-Abundance Ionisation Structure of the Wolf-Rayet Planetary Nebula PB 8*, *PASA*, 35, e005. doi:10.1017/pasa.2018.1
12. **Danehkar, A.** 2017. *Electrostatic solitary waves in an electron-positron pair plasma with suprathermal electrons*, *Phys. Plasmas*, 24, 102905. doi:10.1063/1.5000873
11. **Danehkar, A.** 2015. *Discovery of collimated bipolar outflows in the planetary nebula Th 2-A*, *ApJ*, 815, 35. doi:10.1088/0004-637X/815/1/35
10. **Danehkar, A.** 2009. *On the significance of the Weyl curvature in a relativistic cosmological model*, *Mod.Phys.Lett.A*, 24, 3113–3127. doi:10.1142/S0217732309032046

CO-AUTHOR

9. Boissay-Malaquin, R., **Danehkar, A.**, Marshall, H. L., Nowak, M. A. 2019. *Relativistic Components of the Ultra-fast Outflow in the Quasar PDS 456 from Chandra/HETGS, NuSTAR, and XMM-Newton Observations*, *ApJ*, 873, 29. doi:10.3847/1538-4357/ab0082
8. Kriss, G. A., Lee, J. C., and **Danehkar, A.** 2018. *A Search for H I Ly α Counterparts to Ultra-fast X-ray Outflows*, *ApJ*, 859, 94. doi:10.3847/1538-4357/aabf38
7. Kriss, G. A., Lee, J. C., **Danehkar, A.**, Nowak, M. A., Fang, T., Hardcastle, M. J., Neilsen, J., and Young, A. J. 2018. *Discovery of an Ultraviolet Counterpart to an Ultra-fast X-ray Outflow in the Quasar PG 1211+143*, *ApJ*, 853, 166. doi:10.3847/1538-4357/aaa42b
6. Frew, D. J., Bojicic, I. S., Parker, Q. A., Stupar, M., Wachter, S., DePew, K., **Danehkar, A.**, Fitzgerald, M. T., and Douchin, D. 2014. *The planetary nebula Abell 48 and its [WN] nucleus*, *MNRAS*, 440, 1345–1364. doi:10.1093/mnras/stu198
5. Bizardea, C., Cioroianu, E. M., **Danehkar, A.**, Iordache, M., Saliu, S. O., and Sararu, S. C. 2009. *Consistent interactions of dual linearized gravity in $D = 5$: couplings with a topological BF model*, *Eur.Phys.J.C*, 63, 491–519. doi:10.1140/epjc/s10052-009-1105-0

BOOK REVIEWS

4. **Danehkar, A.** 2019. *Book Review: Holographic Entanglement Entropy*, *Front.in Phys.*, 7, 121. doi:10.3389/fphy.2019.00121
3. **Danehkar, A.** 2018. *Book Review: Gauge/Gravity Duality: Foundations and Applications*, *Front.in Phys.*, 6, 82. doi:10.3389/fphy.2018.00082

COMPUTING

2. **Danehkar, A.** 2019. *AtomNeb: IDL Library for Atomic Data of Ionized Nebulae*, *J. Open Source Softw.*, 4, 898. doi:10.21105/joss.00898
1. **Danehkar, A.** 2018. *proEQUIB: IDL Library for Plasma Diagnostics and Abundance Analysis*, *J. Open Source Softw.*, 3, 899. doi:10.21105/joss.00899

SELECTIVE PROCEEDINGS

7. Nowak, M., **Danehkar, A.**, Kriss, G. A., Lee, J. C., Smith, R. K., and Neilsen, J. 2017. *The Ultra-fast Outflows of PG 1211+143*, In: *American Astronomical Society, HEAD Meeting 16*, 200.03. ads:2017HEAD...1620003N
6. **Danehkar, A.**, and Parker, Q. A. 2016. *Orientation of Galactic Bulge Planetary Nebulae toward the Galactic Center*, In: *Proceedings of the IAU Symposium 312: Star Clusters and Black Holes in Galaxies across Cosmic Time*, 312, 128–130. doi:10.1017/S1743921315007681
5. **Danehkar, A.**, Steffen, W., and Parker, Q. A. 2015. *Kinematical Properties of Planetary Nebulae with WR-type Nuclei*, *Publ.Korean Astron.Soc.* 30, 163–167. doi:10.5303/PKAS.2015.30.2.163
4. **Danehkar, A.**, Kourakis, I. and Hellberg, M. A. 2014. *Electron-acoustic solitons in an electron-beam plasma system with kappa-distributed electrons*, In: *Plasma Sciences (ICOPS), IEEE 41st International Conference on High-Power Particle Beams (BEAMS)*, Id. 7012747 doi:10.1109/PLASMA.2014.7012747
3. **Danehkar, A.**, Frew, D. J., Parker, Q. A., and De Marco, O. 2012. *Photoionization models of the Eskimo nebula: evidence for a binary central star?*, In: *Proceedings of the IAU Symposium: From Interacting Binaries to Exoplanets, Essential Modeling Tools*, 282, 470–471. doi:10.1017/S1743921311028134

2. Saini, N. S., **Danehkar, A.**, Hellberg, M. A., and Kourakis, I. 2011. *Large-amplitude electron-acoustic solitons in a dusty plasma with kappa-distributed electrons*, In: *Proceedings of the 6th International Conference on the Physics of Dusty Plasmas, AIP Conf.Proc.*, 1397, 357–358. doi:10.1063/1.3659841
1. Bizdadea, C., Cioroianu, E. M., **Danehkar, A.**, Iordache, M., Saliu, S. O., and Sararu, S. C. 2009. *BF Models in Dual Formulations of Linearized Gravity*, In: *Proceedings of the Physics Conference TIM-08, AIP Conf.Proc.*, 1131, 29–35. doi:10.1063/1.3153449