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List of Publications

Publications in refereed journals:

1. **F. Alouani-Bibi**, J. le Roux, "Transport of Cosmic-ray Protons in Intermittent Heliospheric Turbulence: Model and simulations", *ApJ* 781, 93 (2014)
2. V. Florinski, J.R. Jokipii, **F. Alouani-Bibi**, J. le Roux, "Energetic particle anisotropies at the heliospheric boundary", *ApJLett* 776, L37 (2013)
3. **F. Alouani-Bibi**, J. le Roux, "Intermittency in the Turbulent Interplanetary Magnetic Field: Observations During Solar Cycles 23 and 24 at 1 AU", *ApJ* 2013 (under review)
4. **F. Alouani-Bibi**, J. le Roux, "Diffusion of energetic particles in heliospheric intermittent slab turbulence", *Space Weather: The Space Radiation Environment, 11th AIP Conf. Proc.* 1500, 86 (2012).
5. V. Florinski, **F. Alouani-Bibi**, J. Kota, X. Guo, "Cosmic-Ray Diffusion in a Sectorized Magnetic Field in the Distant Heliosheath", *ApJ* 754, 31 (2012).
6. **F. Alouani-Bibi**, M. Opher, D. Alexashov, V. Izmodenov, G. Toth, "Kinetic vs. Multi-Fluid Approach for Interstellar Neutrals in the Heliosphere: Exploration of the Interstellar Magnetic Field Effects", *ApJ* 734, 45 (2011).
7. P.T. Goodall, **F. Alouani-Bibi**, K.M. Blundell, "When Microquasar Jets and Supernova Collide: Hydrodynamically Simulating the SS433-W50 Interaction", *MNRAS* 414, 2838 (2011).
8. M. Swisdak, M. Opher, J.F. Drake, **F. Alouani-Bibi**, "The vector direction of the interstellar magnetic field outside the heliosphere", *ApJ*. 710, 1769 (2010).
9. M. Opher, **F. Alouani-Bibi**, G. Toth, J.D. Richardson, V. Izmodenov, T.I. Gombosi, "A strong, highly-tilted interstellar magnetic field near the Solar System", *Nature* 462, 1036 (2009).
10. **F. Alouani-Bibi**, J. Binney, "AGN jet and thermal conduction in cooling flow clusters", *Inter. J Mod. Phys. D* 17, 1953 (2008).
11. **F. Alouani-Bibi**, J. Binney, K. Blundell, H. Omma, "AGN effect on cooling flow dynamics", *Astrophys.Sp.Sci.*311,317 (2007).
12. J. Binney, **F. Alouani-Bibi**, H. Omma, "Bubbles as tracers of heat input to cooling flows", *MNRAS* 377, 142 (2007).
13. R. Srinivasan, **F. Alouani-Bibi**, P.L. Nunez, "Steady-state visual evoked potentials: distributed local sources and wave-like dynamics are sensitive to flicker frequency" *Brain Topography* 18, 167 (2006).
14. F. Allais, J-P. Matte, **F. Alouani-Bibi**, C.G. Kim, D.P. Stotler, T.D. Rognlien, "Modification of atomic physics rates due to nonlocal electron parallel heat transport in Divertor plasmas", *J. of Nuc. Mat.* 337-339, 246 (2005).
15. **F. Alouani-Bibi**, J-P. Matte, M. Shoucri, "Different Fokker-Planck approaches to simulate electron transport in plasmas", *Comp. Phys. Comm.* 164, 60 (2004).
16. **F. Alouani-Bibi**, J-P. Matte, "Nonlocal electron heat transport and electron-ion energy transfer in the presence of strong collisional heating", *Laser and particle beams* 22, 103 (2004).
17. **F. Alouani-Bibi**, J-P. Matte, J-C. Kieffer, "Fokker-Planck simulations of hot electron transport in solid density plasma", *Laser and particle beams* 22, 97 (2004).
18. **F. Alouani-Bibi**, J-P. Matte, "Enhanced electron-ion energy exchange due to a super-gaussian electron velocity distribution function", *Phys. of Plasmas*. 4, 1120 (2003).
19. **F. Alouani-Bibi**, J-P, Matte, "Influence of the electron distribution Function shape on nonlocal electron heat transport in laser heated plasmas", *Phys. Rev. E.* 66, 066414 (2002).

Selected presentations and invited talks:

- "Diffusion of Energetic Particles in Heliospheric Composite Turbulence with an Intermittent Slab Component" **11th Annual International Astrophysics Conference** March 19-23 (2012), Palm Springs CA, USA.
- "Transport of Cosmic-rays in the Inner Heliosphere in the Presence of Composite Two-dimensional and Slab Turbulence", **AGU meeting** December 5-9 (2011), San Francisco, CA, USA.
- "Interaction of AGN jet with intra-cluster plasma: Simulation study of cooling flow clusters and kinetic effects", **NASA Goddard Space Flight Center**, November 3 (2010), MD, USA.
- "Hybrid simulation of interstellar neutral hydrogen interaction with solar wind plasma", **AGU meeting** December 14-18 (2009), San Francisco, CA, USA.
- "Different Fokker-Planck approaches to simulate electron transport in plasmas", **18th International Conference on Numerical Simulation of Plasmas**, September 7-10 (2003), Cape Cod, Massachusetts, USA.