

College of Science



Jie Zhang, PhD

Professor, Physics and Astronomy

Education

PhD, Astrophysics, University of Maryland, College Park

Key Interests

Space Weather | Space Environment | Solar Physics | Corona | Space Physics

CONTACT

Phone: 703-993-1998 | Email: jzhang7@gmu.edu Website: <u>http://solar.gmu.edu</u>

SELECT PUBLICATIONS
> N/A

Research Focus

I work on solar physics, heliospheric physics, and space weather. I study the physical mechanism that generates solar storms, i.e., flares and coronal mass ejections (CMEs). I also study the magnetic evolution of solar active regions and how the evolution leads to energy buildup, instability, and eruption. My research addresses propagation and evolution of CMEs in the interplanetary space. I also put effort into transforming these research activities into tools for predicting solar flares and Earth-impact of CMEs. My work serves the practical purpose of making advanced space weather prediction that can mitigate adverse space weather effects on human space exploration, satellites, communication, and navigation. I have authored and co-authored more than 100 refereed journal articles and two edited books and generated more than 4000 citations. I am one of the co-founders of the space weather research and education program at GMU, which started in 2003. I am a recipient of National Science Foundation (NSF) Early CAREER award (2008) in the US and an elected Kavli Fellow (2011).

Current Projects

N/A