

ASTR 670 / PHYS 597: Heliophysics



DEPARTMENT OF ASTRONOMY, NMSU

Instructor: Prof. James McAteer, NMSU Astronomy, Spring 2016

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Topics Covered:

- Physics of Space Weather - the journey of a solar particle
- Magnetic energy - a primordial flux
- The quiet Sun - interactions with planetary atmospheres
- Magnetohydrodynamics - the trajectory of a solar particle
- Frozen-in flux - the Solar Wind
- Magnetized fluid dynamics - the Sun's environment
- The active Sun - solar flares and coronal mass ejections
- The effects of Space Weather - societal impacts