Physics Colloquium

"Speakable and Unspeakable in the Solar Corona"

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Friday, February 21, 2014 4:10 – 5:00 pm, 108 EPS

Abstract: Some truths are held so firmly that any dissenting argument, even when supported by data, meets with remarkable resistance. This is of course true in every field, no less so in the study of the coronae of active stars like the Sun. Example: Most solar physicists accept that "some" magnetic reconnection happens in solar flares, but there's a persistent notion that reconnection cannot be sustained, despite plentiful evidence of hours-long reconnection episodes. It is a matter of faith also that turbulence doesn't matter (and rarely exists on large scales) in the solar corona, because the magnetic field completely dominates over all other forces. Starting with images and movies of solar eruptions (which just happen to be eye-catching and beautiful), I will construct a heretical argument that the exceptions to these strongly held truths are perhaps more important than the general conditions which they violate.

Host: Jiong Qiu Refreshments 3:45 p.m. courtesy of Dana Longcope EPS 2nd Floor Atrium

