

Solar evidence for magnetic reconnection

H. S. Hudson (UC Berkeley)

Imaging of the large-scale solar corona, especially at EUV/X-ray wavelengths, shows clear changes of magnetic connectivity between flux tubes connecting different domains in the photosphere as "emerging flux" appears. In flares and CMEs we have many indirect indications that provide good circumstantial evidence. Most of the observations show unexpected properties as regards the standard 2D flare reconnection model. We do not have a definitive schematic view of the 3D process yet, and this may account for some of the uncertainties.