Sun Stuff

active regions

Alfvén waves

coronal holes

coronal loops

coronal mass ejections (CMEs)

faculae

filament

flares

flux tubes

- Formed deep in the convection zone.
- Rise by magnetic buoyancy in an Ω-shaped loop.
- Magnetic field lines can be thought of as infinitely thin flux tubes.

frozen-in flux In a perfectly conducting material (i.e. $\eta = 0$), Ohm's law goes from $\vec{E} + \vec{v} \times \vec{B} = \vec{J}\eta$ to $\vec{E} + \vec{v} \times \vec{B} = 0$ Nothing can be perpendicular to the field lines ... See Alfvén's Theorem.

plages Moderate concentrations of magnetic flux $\sim$ 100 G.

pores

prominence

solar wind

spicules

sunspots Dark regions of intense magnetic field.