

## **WG1-1: Sub-surface Structure and Evolution**

- The dynamic evolution of active region magnetic fields at the photosphere provide important constraints on theories and models of CME initiation, and ultimately provide the lower boundary conditions for large-scale coupled models of the Sun-to-earth system.
- The evolution of the magnetic field at the visible surface of the Sun is ultimately governed by forces acting on magnetic structures at and below the photosphere, in the convecting interior.
- In this session we will discuss current theories, computational models, and helioseismic observations of sub-surface magnetic fields and flows. We will discuss how well current models explain the observed characteristics of active regions, and will steer our discussion toward how these models contribute to our understanding of the solar origin of space weather.