

## **Solar: Dynamo / Cycle / Global Surface Properties**

## Session Facilitator: Peter Young (NASA Goddard)

## The connection between atmospheric activity, surface flows, and the magnetic field

- Major Science Questions:
  - O How is the corona heated?
  - O How is the solar wind accelerated?
  - O How are eruptions and flares triggered?
- What do we need to do?
  - Quantify the different components of coronal heating.
  - O Quantify the energy budget for reconnection in the atmosphere.
  - Quantify the magnetic field configurations and surface flows that lead to heating and eruptions.
- Future directions
  - Modeling: higher resolution, multi-scale hybrid modeling, dynamic field extrapolations, atomic physics and processes
  - Observations: higher resolution, integral field spectroscopy, all-atmosphere spectral coverage/magnetograms

